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OUTLOOK NOTES

No class of professional workers has more frequent or better attended conventions than teachers. No class is better qualified so far as education goes to make such meetings THE MEETING interesting and significant. No class is better quali-HABIT fied for critical judgment on the papers and discussions that form the ostensible purpose of such meetings. As year after year the number of teachers' associations under various names increases, and the attendance at each meeting shows no sign of waning enthusiasm, it must be that on the whole these conventions are meeting the needs of those who convene. Yet if you talk with some of the steadiest attendants at these gatherings you will as a rule be able to sum up their judgment of the convention, whatever it may be, under two heads; they think the formal discussions, as to content and result, for the most part petty, frivolous, unorganized, unbusinesslike; they get their value out of the convention by the incidental opportunity for informal meeting with certain individuals. "These things, you know, are a great bore," said a clever man to me the other day as we were walking together, late, to a "meeting," "but I like to see the men, and now and then it is pleasant to hear the voice of a man you do not know, but know of, even though he says nothing of importance." Then, too, it has come to such a pass that many feel that they must show themselves at most, if not all, of the meetings which they might reasonably be expected to attend; otherwise they lose caste, get out of the swim, and become in danger of gracing the rear rank instead of leading the van of educational progress--at least in popular estimation.

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Undoubtedly the meeting habit has been contracted by a very large number of teachers. The habit is a growth of recent years. The meeting together of teachers has been universally proclaimed a good thing-so good a thing that by no possibility could there be too much of it. The cost of attendance has become a serious item in the personal budget of many a teacher. The arranging of programs has made sad inroads into the time of more than a few educational administrators. The preparation of papers and addresses for the various meetings has made such enormous drafts upon the productive power of those considered competent to address the meetings that the year's work of many a man capable of better things may be summed up in the titles of his occasional addresses. Many a man must have a care, or his literary baggage at the end of life's journey will consist of small pamphlets and stray publications innumerable, not one of which will survive its owner's passage beyond the grave. For the many who can do this sort of thing well, and, perhaps, can do nothing better, all this may be well enough. But there is an overpowering temptation, and an almost overwhelming pressure for the few who might be investigators to compete for this transient popularity. How seldom do we hear in any of these gatherings a paper that is the fruit of scholarly research. In scientific societies such papers are, indeed, still tolerated, but not in so-called educational meetings. The staple diet of these latter is hash - so it be palatable and well served all reasonable expectations are satisfied.

Discussion is the life of a meeting. The ideal program presents a few living themes of general interest. Each theme is introduced, if possible, by two leaders representing conflicting views. There are no appointed disputants beyond these leaders; if they do their work well there will be no lack of eager volunteers. Spontaneous discussion reveals personality far more than set papers. The man who is appointed in advance to discuss a paper simply writes another paper himself. It may be urged that a number of prominent names on a program attracts a large attendance. To yield to such a consideration is to stultify ourselves as educators. When teachers come to admit that size

and greatness are synonymous, it is time for them to cease talking of training for citizenship and of teaching morality in the schools. Then, as the social element is avowedly so important, the committee on arrangements cannot be too careful in providing abundant opportunities for social intercourse. The teachers' meeting is an institution of great potential good, but it may degenerate into a mere spectacle of seeing the wheels go around.

In the year 4000 A. D., a graduate student in the Central University of the World took his thesis in an investigation of the dominant educational ideals of the last decade of LOOKING the nineteenth century. Applying the statistical BACKWARD method, he proceeded to determine these mathematically by computing the number of times certain words were used, the one most frequently employed being the best fellow, that is, embodying the uppermost thought of the period. The results of this calculation were somewhat astounding, and more absolutely conclusive than any similar investigation ever made. One word—a word by that time obsolete for twenty centuries, and requiring an elaborate explanation to make it intelligible to his readers to whom the idea it stood for was in no wise familiar -not even through heredity-stood practically alone. In the final computation it was found that the leading word was used one thousand times more frequently than the next word in the list, and the use of all other words was so infinitesimal that they could be entirely disregarded. This significant word which so clearly indicated the overwhelming educational interest of the years 1890-1900 was the strange word CURRICULUM. The word that possessed one one-thousandth of the importance of this giant was the word culture. In 4000 A. D. "curriculum" had been obsolete for many centuries; culture, however, was still a well-known word; indeed, it designated the only idea of importance in education. When the investigations of the young scholar were published it was considered a very significant fact that he had discovered slight traces of the idea of culture in so remote and barbarous a period as the last decade of the nineteenth century. C. H. THURBER

ON INTERNATIONAL CORRESPONDENCE BETWEEN PUPILS

The Society of Modern Philology in Saxony^x has established an international correspondence between French, English, American, and German pupils, the effect of which may be said to be very helpful in the teaching of modern languages. It is a kind of new propelling power that has been introduced into the lessons, a new method of teaching, in which the pupils themselves are the professors, and it seems that they like better to learn from their equals than from their superiors.

A correspondence between single pupils has, it is true, existed for many years, especially between French and German boys. It was only about a year ago that it was established on a large scale in France by the "Revue universitaire," in Germany by the Saxon Society of Modern Philology. Upwards of one thousand pupils, male and female, have been put in correspondence with each other by a central committee, whose head is the well-known professor, Dr. Hartmann, at Leipzig.

As to the advantages which this correspondence offers, it must be observed that they are first of all practical ones. All teachers know how awkward boys are in writing letters, even in their native language; girls are by far more clever in this respect, and for them difficulties generally arise only when they are obliged to write in "foreign tongues." The common school subjects for the latter are often tedious to them, because they want a background which life only offers; an imaginary correspondent to whom the letter is addressed will never have the same charm for them as a real one. "A letter from abroad," says a renowned German teacher, "is an event, a concrete case, to which all the charm of personal and self-felt things is attached. It shows the pupils that beyond the frontier, 'beyond the moun-

¹ Der Sächsische Neuphilologenverband, Professor Dr. Thiergen, Dresden, president.

tains' there are boys and girls living, who are toiling like them in order to learn the foreign language, who meet with the same difficulties in overcoming the obstacles which they find in their way. They perceive what an amount of labor and hard work is necessary before two nations, differing widely in customs and language, can make each other understood. With that perception a new world, as it were, is revealed to them, a new understanding of their work is given to them, it strikes them why'they must toil so hard, and that it is not for the school or for the teacher that they are working. The towns beyond are no longer mere black points on the map, but filled with men, feeling and working and suffering like them; the language they learn, no longer a part of the schoolbooks only, which they open every day with more or less interest, but a means of conveying the ideas of a nation to others. The spirit of life pervades the dead world of books,"

What a pleasure it is to a pupil when he has finished the first letter to a real Frenchman! To him it is like a great deed, an action he has done by himself, unhelped and unguided by teachers or parents, as is so often the case with school work. And a far greater pleasure when he receives the first answer! How carefully he peruses the list of mistakes he made, and how he takes care not to make the same blunders again! From this point of view the international correspondence is, indeed, a new means of promoting the often scanty results in the teaching of modern languages, an advantage which the classical languages cannot boast of, and which, in due time, ought to be employed in all schools where modern languages form the principal part of instruction.

In Germany more than 3000 addresses of foreign pupils have been asked for since the establishment of the central committee in Leipzig (from March 1897 to August 1898). Pupils of all kinds of schools are to be found among them, and the higher classes form a considerable part of them. In France and England, too, this new institution has met with the most favorable reception, only America has, as yet, proved a little skeptical as to the advantages of this kind of correspondence, which is easily

to be seen from the small number of addresses sent from this part of the world. And yet all those who have had an opportunity of observing the pupils who took part in this correspondence are unanimous in the praise which they give to it. The head master of the High School for Girls, in Aberdeen, F. I., writes in the Journal of Education (May 1808, p. 275): "I can testify from personal experience with my pupils that correspondence with German pupils is an excellent help and stimulus in the teaching of German. Our girls have taken up the matter most enthusiastically, and are eagerly looking forward to their monthly letters. Of course, the correspondence must be under the superintendence of the respective teachers, without, however, assuming the shape of help or correction. The correspondence gives a healthy interchange of views on school matters, customs of the countries, descriptions of towns and places, which cannot but be useful and helpful to the youthful correspondents. Particularly in the domain of idiom have I found the correspondence of great help. The young correspondents will also be very anxious to do their very best, for fear of causing ridicule by using wrong words or constructions, and will thereby be much improved in their ordinary school compositions. As one letter a month only from either side is demanded, it cannot be said to be a great tax on the pupil's time."

It is a matter of course that not all pupils can take part in this correspondence, but the profit derived from it may, nevertheless, be rendered universal, if the letters are sometimes read to the whole class and the contents made a subject for conversation in the lessons. In order to enable pupils of the lower or middle classes to share in the benefit which the international correspondence offers, and to give them an opportunity to find a correspondent with whom they may interchange letters for several years, it has proved very useful to cause those pupils to write alternately a letter in their own native language and a shorter one in the foreign idiom. We hope in this way to connect threads which will also last in after life. Only think what a pleasure it must be, when the two correspondents meet each other, after they have left school, when they can shake hands

after they have grown up and, perhaps, have become great men in their country. The spirit of peace which pervades the better classes of all European countries, and which is particularly fostered by the German emperor, is silently but effectively supported by this correspondence. For we must not forget that not only the pupils, or the schools and teachers, but also the parents and families to which the pupils belong take a lively interest in it. The arrival of a letter from abroad is a great event in the family, and the contents of the letter are read and discussed by all its members. The little joys and sorrows of the youthful correspondents, the festivals in the family or country, the customs, the events of the day, the different homes are growing quite familiar to the pupils and their families, and since so many thousands are corresponding with each other, we may say that the different countries which, up to this date, were used to consider each other as mortal enemies, only thirsting for each other's blood and only waiting for the opportunity of throwing the blazing torch of war into the peaceful homes of their adversaries, are linked together by new ideas, by peaceful thoughts, by mutual respect and love.

In order to prove that the families or parents are as well interested in the correspondence of their children as the pupils, I beg to cite a letter from a French gentleman, whose son had suddenly fallen ill, and who takes up the pen himself in order to answer the letter which his son had received from his German correspondent. It runs as follows:

Le 22 août 1897

MON CHER AMI:

Aux lieu et place de mon fils je vais vous accuser réception de votre aimable lettre du 18 ct. arrivée ici jeudi soir avec une splendide photographie dont nous vous remercions bien, toute la famille. Cette délicate attention témoigne en faveur des bons sentiments que vous portez à mon fils. Agréez-en, cher ami, toute notre gratitude.

X. par contre se fera un devoir en même temps qu'un plaisir de vous envoyer sa photographie en tenue de collégien français, sitôt son retour de N., où il se trouve en ce moment en villégiature estivale chez son oncle, qui n'a pas d'enfants et chez lequel il est par conséquent choyé et dorloté.

Nous avons effectivement appris par les journaux les effroyables inondations qui ont ravagé la Silésie et la Saxe tout récemment. Ces fléaux sont bien terribles pour ceux qui en sont victimes. Heureusement que les bourses des favorisés de la fortune viennent au secours des malheureux. L'empereur Guillaume a souscrit 15,000 mark pour les victimes des inondations. C'est un grand cœur!

Nous sommes heureux d'appendre que votre usine n'a pas été trop malmenée. Recevez-en nos bien sincères félicitations!

Quant aux études de mon fils, elles sont loin d'être terminées. Il pourra vous donner à ce sujet plus de détails que moi. C'est plutôt son affaire, de même que pour leur tenue de collège qui a beaucoup d'analogie avec celle des officiers français.

Laissez-moi maintenant, mon cher ami, vous manifester toute mon admiration pour l'excellente initiative prise par les établissements d'instruction publique d'entretenir entre les élèves des différents pays d'Europe une correspondance aussi instructive qu'agréable. Nous sommes là bien loin des relations politiques où tout est méfiance et calcul. Cette idée est heureuse et ne pourra porter que de bons fruits. Elle sera peut-être un acheminement vers un rapprochement plus intime entre les deux grandes nations, qui sont loin d'être encore amies.

Vous voudrez bien, mon cher ami, présenter nos meilleurs compliments à vos chers parents, sans surtout oublier vos charmantes amies M^{iles} B. et C. qui ont eu l'amabilité de mettre un petit mot sur la lettre de mon fils.

En attendant vos nouvelles, nous vous assurons, mon cher ami, de nos meilleurs sentiments.

It is easily conceivable that in an institution so new as the International Correspondence, and so widely spread all over France, England, and Germany, in which so many different elements of pupils are mixed up, abuses may occur and, indeed, have occurred. To prevent these abuses a certain number of precepts have been given by the Central Committee, above all a certain restraint as to the subjects of the letters is to be observed, all matters of religion, politics, and those concerning the teachers being strictly excluded. In the following lines I beg to give the most prominent of these precepts.

I. The international correspondence is in all schools submitted to the superintendence of the teachers, who are trusted with the instruction in foreign languages. At all events the letters and other communications from abroad must be shown to the superintending teachers.

2. Only those pupils are to be admitted who may be absolutely trusted in a moral point of view and whose parents have

given their consent. At the very outset of their correspondence they must receive some information about the new kind of letter-writing they are going to begin, and above all they ought to be taught that they must never write anything that can dishonor them or they country.

3. The names of the pupils are to be sent in by the teachers, not by the pupils. An arrangement of the correspondence between the pupils themselves is not to be permitted; it could produce a great many abuses which might seriously endanger the whole institution.

4. Junior pupils, whose knowledge of French or English is sufficient for the understanding of a foreign letter, but not for writing one themselves, must in the beginning write in their native language; they will in this way be connected with their partners and mutually improve their knowledge of the foreign idiom.

5. Senior pupils write alternately in their native language and in the foreign idiom, or half of each letter in their native tongue, half in the foreign language. The first letter is always to be written in the mother language.

6. As these letters in the native tongue shall be typical ones, models of genuine German, French or English; particular care must be taken to render them interesting and free from any mistakes in form or orthography. Some hints from teachers or parents will be of great use in this respect.

7. It is advisable to gather the letters from abroad in a special book. They will prove an excellent means of improving in the foreign language by repeated perusals and at the same time be a very valuable memorial in after life.

8. Letters which are particularly remarkable in form or contents ought to be made the subject of conversation for the whole class, a copy of which in prominent cases would be very thankfully accepted by the Central Committee.

9. The mistakes made in a letter are to be corrected by the partner and sent back with his answer. The more these corrections are enlarged, especially by adding more refined constructions than those used in the letters, the more they will prove valuable to the partner.

10. The terms for sending letters are fixed by the correspondents themselves; it is, however, advisable not to write less often than once a month. The dates when letters are sent or received ought to be registered by the teacher.

II. To avoid irregularities in the sending of letters it will be of use to write the name and the address of the sender on the back of the letter. A pupil whose partner is prevented from continuing the correspondence must write to the Central Committee for a new partner, who is then generally procured

from a different part of the country.

12. Postcards with views may occasionally be used, but cannot be thought sufficient for a regular correspondence. All printed missives must pass through the hands of the teacher before they are handed to the pupils. Any abuses of the correspondence are to be punished by striking the name of the pupil from the list of correspondents, or publishing it in some peda-

gogical paper.

However flourishing the institution of international correspondence may be, there is only a scanty list of names of American pupils to be found. And yet this country has a particular charm for all German boys and girls. A great many of them have relations living there; the mighty development of this vast republic cannot but excite admiration among all classes of people in the Old World; the intercourse, the commerce between America and Germany, increasing year by year, render the knowledge of American customs and institutions more valuable than that of any other country. It would, therefore, be considered as a very favorable effect of the above lines if the American schools would take a more active part in the correspondence with German pupils. Students and grown up persons are equally admitted to it, and will be connected with suitable partners. All names and addresses are to be sent to the Central Committee, Professor D. Hartmann at Leipzig-Gohlso, Wiesenstrasse 2.

OSCAR THIERGEN

DRESDEN, Sept. 17, 1898

HISTORY IN THE HIGH SCHOOLS'

As a stranger in your midst, I appreciate your courtesy in inviting me to participate in your deliberations, and to express the opinions of one outside the pale of your ilk, who is interested in this subject only to the extent in which he is interested in the best education of all our young people.

I am not an historian nor a special student of history; neither has this study come within the scope of my teaching experience to any considerable extent, therefore I shall not be charged with the enthusiasm of a specialist, nor with a purpose to exalt a subject that has filled the range of my vision, and produced partial myopia in my intellectual sight. My investigation, correspondence, meditation and most diligent study of the attainments and the power of attainment of very large numbers of pupils of both sexes, have brought to my mind the overwhelming conviction that it is both unreasonable and unjust to set exclusive metes and bounds to secondary and college courses of study, and to withhold a diploma and a degree, until a definite amount of work has been accomplished in a certain prescribed number of compulsory subjects.

I do not mean that any credit should be given for results that are not commensurate with legitimate requirements.

I mean it is not ours to say, just what subjects a young man or woman must take and to just what extent he or she must pursue them, in order that he may be called an educated man.

The proposition, that what is one man's meat is another man's poison, may not be as easily demonstrable in the sphere of the intellectual as in that of the physical, but we believe it is as true nevertheless. High schools and colleges are not established simply to nourish the survival of the fittest, simply to polish what nature has already made brilliant, and to superadd to a

¹Read before the American Historical Association, Cleveland, Ohio, December 1897.

remarkable intuition of knowlege; they are not for the Lincolns and the Edisons, but rather are they maintained for the uplifting of the masses, for the polishing of the rough diamonds, and for the truest and best development of those aptitudes and activities which are of divine implanting.

There are many pupils whose mathematical faculty is of such inferior quality, that the most diligent application under the most favorable circumstances, to the study of spherical geometry and differential and integral calculus, would be of little worth either in its reflex influence upon character, in the store of knowledge gained, or the mental grasp acquired. The same may be said of other subjects. What we may assimilate may produce intellectual dyspepsia in others. The constituent elements that make their mental muscle vigorous and virile, may superinduce flabbiness and flatulence in us.

I plead therefore for large options in course of instruction; for a deeper and keener study of child-nature, for a better understanding of the influence of heredity and environment, in the early stages of youth's intellectual unfolding, and for better opportunities of ascertaining the extent and character of those prenatal germs which, if they could be analyzed, would determine for us the kind and quantity of that mental pabulum most conducive to the development of those germs to their highest and richest fruition. We have learned these lessons in botany, in agriculture and in the rearing of the lower animals. We cannot raise oranges in Maine nor build snow forts in Southern California. We do not breed draft horses from fast trotters. In tilling the fields we adapt our seed to our soil, but when we come to the culture of the human intellect, that one element that separates man from the brute, and lifts him into a nearness to the Divine, we act as if all were to be cast in the same mediæval mold, instead of guiding each along the lines of natural selec-

It is time then that the seed sown for ten years by these great associations, which are studying the secondary school problem, should begin to bear fruit in the evolution of such courses of study, as will meet the needs of the individual, and commend themselves to the warm support of all classes of citizens. To this end then in the larger secondary schools properly equipped, generously maintained, presided over by accomplished and scholarly principals and well trained teachers, I would have a course of study embracing all those subjects, to be continuouly taught, which it is advantageous for young people from fourteen to eighteen years of age, who have had good instruction for eight years in the common English branches, to study. Such a course would offer two or three times as much work as any one pupil would be expected to master in a curriculum of four years. It should be rich in language, ancient and modern, with abundant opportunity for English and its literature. Mathematics, history, science should be offered each year. Civics and political economy must recieve due attention. In fact every study which the wisdom of the colleges proves to be profitable and practical and disciplinary for pupils of this immature age to study, should find its proper place.

No study should occupy less than one year of four or five periods a week of fifty minutes each for forty weeks. Four studies four periods a week for four years would give sixteen divisions. This would leave but the merest minimum of time for drawing, vocal music, and physical culture, all of which the model secondary school, especially the public school must offer, and the benefits and results of which, together with the time essential to their proper acquirement, the colleges as well as the people should recognize.

If we must give five periods a week to foreign languages, we shall be forced to give but three to English. While I believe three studies five periods a week are better in many respects than four studies four periods a week, yet the demand of the five great departments of study—the five windows of the soul as someone has poetically expressed it—are such, that we can satisfy program makers and college requisites only, by insisting on four studies as a basis. In other words, it will be more satisfactory to omit each once a week than to throw one subject out altogether.

Let me explain my position more clearly by commenting on

the one subject in which this association is particularly and commendably most interested. In passing, however, permit me to be sufficiently bold, even though I may be unpardonably heretical, to say that my experience and observation teach me that our secondary schools should exclude from their curriculum that offensive abortion, now known and dishonored throughout the land, as general history. It is a one year study, and no book containing five or six hundred pages, prepared by the clearest mind, in the best style of English speech, for any year of the high-school course, and which shall be what its title indicates, a general history, will be little more than a general compound of facts, dates and hard names.

The purpose of the study of history in our secondary schools is not, to my mind, to put our pupils in possession of a large number of facts and dates, not to draw on their imagination to the extent of making an effort to conceive the beauty and poetry of a great field of waving, ripening grain, by taking them through acres of dry stubble. It is rather to inculcate a taste for history, to engender a love for historical research, to show pupils how to read, to compare, to contrast, and to draw conclusions; to inspire them with such interest in the philosophy of history, to impart to them such a knowledge of the rise and development, and decay of nations and of governments, to lead them to so study the solution of those great problems that have made national epochs, that they will keep in touch with the stupendous movements of their own age, and understand something of their connection with the inexplicable laws of evolution which are constantly changing society and lifting the world to a higher plane of thought and action. To accomplish even a little of these beneficent results, I believe it is far better for pupils to study the history of one or two nations with such care and thoroughness, that they will, of their own accord if necessary, take up the study of other nations by similar methods.

In this model course of study I would have a place for history in each one of the four years. I would give to the first year Grecian and Roman history, with the understanding that the subject should be developed and its lessons impressed through

the other years, among those pupils who were fortunate enough to select, to enjoy, and to profit by the pursuit of Latin and Greek; in the second year I would place mediæval and modern history, with special reference to France and Germany from 476 A.D.; and these should be still further illumined by the teachers of French and German in the classes of those languages; I would devote the third year to English history, the most important to the pupils in our American schools, next to that of their own country and quite essential to a thorough understanding of the latter, and follow this English history by a systematic study of American history and civics in the fourth year. I am not so crudely optimistic nor so completely self-centered as to expect the American Historical Association to adopt this plan in its entirety; I am rather of that humble mold which would impel me to sit at your feet to learn the when, the what, and the how of the secondary-school historical study, yet I do most fervently hope that this association, representing this cause, and so largely responsible for the place and power which history may have in these colleges of the people, these schools, which, outside of the state universities, represent the highest form of public education, will formulate a report in detail on the subject of history in our secondary schools, and forward it to the national committee on college entrance requirements (with whose chairmanship your speaker is honored), that they may, so far as it can be made practical and adjustable, incorporate it in their final report to the National Educational Association.

Just one thought more, that I may not be misunderstood. I would not require four years of history, either as a condition for a diploma from a high school, or for admission to college. I would, however, dignify and emphasize the value of this study by giving the opportunity to pupils to pursue it four years, with the expectation that all would take it one year, a very large number two years, many three years, and a few four years. Side by side I would place the sciences, and the foreign languages, ancient and modern, the English and mathematics, civics and economics, and to every pupil who could present an honestly authorized statement, or, if you please, pass a satisfactory exam-

ination in accordance with that statement, viz., that he had diligently and successfully pursued a complete course of study for four years in a secondary school of standard excellence, I would give a passport to college, and lead him into that broad highway of learning from which branch those avenues in which he can secure the highest general and specialized education to which his natural and acquired abilities seem to indicate he can best attain.

I am aware that this is not the time for the discussion of this great question, and I do not know whether the representatives of this American Historical Association are particularly interested in it. Yet I am confident that there will be no satisfactory solution of the problem as to the proper place and quantity of history in the secondary schools, until the burning question of wider options in entrance requirements is also settled. I am a young man, yet it is clearly within my memory when no history but the merest modicum of that of the United States was required, and therefore the preparatory schools did not teach it; and for many, many years after Roman and Grecian history found a place in the column of requisites with Latin, Greek, and mathematics, the insistence for this one requirement was merely nominal, and I have heard a distinguished professor of a distinguished university say within a year, that a student can pass the examination test in history by the study of three weeks.

President Eliot, in his recent address at the Worcester Academy, said: "In schools preparatory to college one often finds a primer course in Greek and Roman history in some contracted and despised corner, but for substantial teaching of history one still looks in vain in the great majority of American secondary schools."

There should be no foundation for such statements.

The secondary schools should be encouraged to teach history with the same definiteness of purpose that they have been to teach Latin, Greek, and mathematics. The determination of the colleges to make requirements of admission fixed, limited, absolute, is contrary to the spirit of the age and to the laws of nature, and subversive of the highest interests of education.

To deny a boy or girl the benefits of extended training because, forsooth, he or she is not *en rapport* with ancient languages and solid geometry is not in harmony with the results of psychic research.

In the management of the secondary schools which impart instruction through the delicate and dangerous period of puberty and adolescence, when the nervous organization is at its highest tension, the end, not the means, of education should be kept in view.

Pupils may be taught in classes, but not in masses. The welfare of the individual is the first consideration, and all subjects will receive due attention only when the secondary schools shall be allowed to adopt courses which shall furnish pupils abundant opportunities for the pursuit of those studies which are in the line of their tastes and talents; then will the colleges welcome a class of students better and more uniformly prepared for the researches to which they may be invited, and the nation will have a class of citizens more useful and more contented, with more power to do and to be, although they may not be so thoroughly furnished with what was once essential to a so-called liberal education.

A. F. NIGHTINGALE

CHICAGO, ILL.

THE PREPARATORY EDUCATION OF MEDICAL STUDENTS.

THE medical profession is, at present, so grievously overcrowded that there is urgent need of some means of diminishing the number of graduates. Fortunately—or unfortunately? the limitation of future practitioners can be very simply effected by requiring a standard of education to which no reasonable person could object as excessive. The English language is lacking in words to distinguish sharply between the result of literary and scientific studies, which are of use mainly in building up the intellect, and of those studies that are of value only as they prepare for the practice of some profession, and which are of no general interest. For both we have the one word education. The former is like gold, of little practical utility in itself, but capable of exchange for almost anything that may be desired. The latter may be compared to one of the baser metals, of great value to one who has some particular use for it, but not adapted to wide circulation. So far as professional training is concerned, there is no life work which demands so much and yields so little as medicine. No other professional study involves so much risk of life and health, no other is attended by so great fatigue, and few require so great monetary expense and the sacrifice of so much time - three to five years. While we must admit that the requirements of professional study are all that can reasonably be enforced, they are not sufficient to keep the number of graduates within proper bounds, and even the medical schools that demand the most of their matriculates still graduate a considerable minority of students who are utterly unfit to practice medicine on the broad basis that ought to characterize professional labor in any field.

The conclusion is forced upon us that the time for culling out unsuitable men is not at the end of the medical course but at its beginning. The most eminent men of the profession,

including those who, as teachers, are urging the adoption of longer and longer courses of study, are, for the most part, graduates of "two-year" colleges. With such illustrious examples, it seems plain that the best prepared physician is not necessarily the one who graduates with the most definite knowledge of medical facts, but the man who, by virtue of a good preliminary education, a well-trained intellect and habits of close study, will go through life acquiring more and more information and skill. When the slightest indication is offered that the increased requirements of medical study are encroaching on the time which the average student can afford for preliminary education, it is time to call a halt. The encouraging statistics as to the almost unanimous requirement of preliminary education by the medical colleges of this country are misleading. In all but a few instances, the requirements are so low or so modified by saving clauses, that they exclude almost no one. In fact, the formulation of requirements which demand so little, places an official stamp of approval on comparative ignorance.

There is at present only one medical college which requires for admission a collegiate education, while the great majority accept a "red schoolhouse" training. There will always be shirks who will try to enter the medical profession—and every other life work which has genuine or specious attractions-with the least possible exertion. Yet the very people who pretend to no knowledge of medicine, and who are liable to neglect and injury at the hands of incompetent physicians are not only slow to originate laws for their own protection, but view with distrust the practical measures for the regulation of medical practice and education which the better class of physicians are urging upon them. For example, the present law of the State of New York, requiring the medical student to possess merely a common-school education, was passed only after years of hard work by representative members of the profession. It would be interesting to know the true reason for the bitter opposition to a measure destined to throw an additional safeguard around the life and health of the very politicians who voted against it. With this example on the part of the richest, most populous, and one of

the most intelligent states of the Union, the conclusion is forced upon us that any decided improvement of the existing conditions must be brought about by individual agitation and the voluntary action of medical colleges.

It is, on the whole, a favorable indication that the majority of young persons in attendance on schools of all kinds, regard an education-professional or literary-largely as a means of livelihood. Thus, while they cannot assume quite the same impartial attitude toward their studies that one might whose only aim was intellectual improvement, they have a keener inducement to mental exertion. One of the noblest of American educators, the late Martin Anderson, antagonized the system of elective studies in college, on the ground that a broad general training ought to underlie the gratification of personal inclinations in the pursuit of wisdom. He believed that, with some few exceptions, the proper place for elective studies was the postgraduate department. Unfortunately for the successful execution of this opinion, the vast majority of college students must regard their course, not as a preliminary but as a dearly bought consummation of scholastic education. At present few students, even those actuated by high motives, feel that they can so far postpone their entrance on active life as to precede their medical course with one at a literary college. Of 250 students at a certain medical school, 18-about 7 per cent.have collegiate degrees. It would hardly seem advisable to compel the other 93 per cent, to attain the same standard, though all possible encouragement should be given to advanced preliminary training, and it would certainly be well to require a highschool education or its equivalent.

It is manifestly unfair to require the same length of attendance on medical lectures from the man who recognizes at a glance the meaning of technical words, and whose mind is drilled to the rapid acquisition of knowledge, as from some other who must devote half his energies to the mere mastering of words, and whose habits of study are almost entirely unformed. Yet, since the introduction of graded courses of instruction in medical colleges, it is practically impossible to allow the former to

graduate in less time than the latter, unless he has pursued certain studies such as physics, chemistry, physiology, and microscopy, which are included in the professional curriculum, and from which he may be excused. The English academic course, and the typical collegiate course leading to the degree B.L., contain almost nothing of direct value to the medical student, whereas both the scientific and the classical courses are of direct assistance, the latter because it includes the study of the two languages, Latin and Greek, from which almost the entire medical vocabulary of some fifty or a hundred thousand words is derived.

There are certain scientific studies that can properly be credited on either an educational or a professional course, and, recognizing this fact, several universities allow students to complete the literary and medical courses of four and three years, respectively, in six. Cornell, many years ago, offered a preparatory course in medicine, and the writer wishes to urge that colleges and academies throughout the country recognize the needs of prospective medical students, not so much by establish ing new branches of instruction as by allowing a proper combination to be made from those already offered. Such a course would involve the sacrifice of the purely educational ideal, but the benefit of inducing hundreds of young men to increase their scholastic training on account of the practical addition to the course, would more than compensate for any encroachment on academic traditions. So far as a well-equipped college is concerned, especially if professional schools are associated with it, all the studies which would have a more or less direct bearing on medicine could be taken as elective branches—it is assumed that in the courses leading to any given degree, the student is left free to choose about half his work.

To include the preparatory medical studies in a high-school curriculum, with a proper proportion of purely educational work, is rather more difficult. The scheme here submitted is a combination of the classical and scientific courses. Any student of fair ability and in good health—if his health is not robust, it is folly for him to contemplate a medical career—ought to be able

to complete it in four years, while the more mature, who are able to pursue four studies at a time during most of the course, could finish in three years. In the proposed schedule, the unit is the term or semester of one hour of recitation daily for about eighteen weeks of five days each:

Latin - Six terms, grammar, Cæsar, Cicero, half of Æneid.

Greek-Four terms, grammar, Anabasis, part of Iliad. Derivation of scientific words.

Mathematics - Four terms, Algebra, Euclidian geometry.

Physic - One term.

Physiology-Two terms, including elementary anatomy and hygiene,

Chemistry—Four terms, including inorganic and elements of organic chemistry, qualitative and rudiments of quantitative analysis.

Botany-One term, including field work.

Microscopy — Two terms, including rudiments of histology and bacteriology. Stenography — Two terms.

The arrangement of the studies is essentially that ordinarily followed. Care must be taken to intersperse the earlier scientific recitations, laboratory, and excursion work with the more fatiguing language and mathematical studies. Stenography, which is now taught in a number of public high schools, is proposed simply as an elective course. It is a most valuable aid to the medical student, as most of his instruction is in the form of lectures. There is also ample opportunity for the physician to use a rapid system of note taking.

Sufficient allusion has already been made to the practical utility of Latin and Greek. For some reason there is a dread of the latter language. After the first few hours' work on the alphabet, much of the apparent difficulty is dissipated, and by omitting the accents—which are ignored in anglicizing Greek words—and passing over some of the most irregular inflections, a course in Greek could be prepared which would be scarcely more difficult than a corresponding one in Latin.

Botany and chemistry could be made especially interesting to the medical student by referring to the physiological, toxic, and therapeutic actions of the various plants and chemicals. This, however, would necessitate such teaching as could not ordinarily be obtained in academies.

The study of the derivation of technical terms from the Greek and Latin, would be taken up with the ordinary recitations, in the same way that classical geography, mythology, and history are now taught. In place of the routine grind of compositions on assigned subjects about which the pupil knows little and cares less, the writer would suggest that occasional theses be required in connection with the scientific courses. It will be noted that some of the courses assigned are more of the nature of diversion or of elective work, so that the actual drain on the strength of the student is not as great as the number of termunits might indicate. Thus, much of the botany, almost the whole of the microscopy and the greater part of the chemical laboratory instruction would serve as relaxation from the severer requirements of the mathematical and linguistic studies. Considered as a basis of a four years' course, the scheme proposed affords ample opportunity for the pursuit of modern languages or such other work as the student may elect.

A preparatory course of this nature could be made especially attractive if the medical schools would reciprocate by establishing a preliminary course, extending through the summer and early fall, so as to add the more technical portions of chemistry, physiology, and microscopy, and allow these branches to be passed off before the beginning of the regular term. In the same course could be included enough anatomy so that this study could be concluded at the end of the regular year. Thus, at the end of his first year's attendance on medical lectures, the specially prepared student would be a full year in advance of other members of his class. Such an arrangement would violate the letter of the present law, but it would more than fulfill its spirit, so that the necessary modification could be easily secured.

A. L. BENEDICT

BUFFALO

THE TRAINED TEACHER

"THE greatest fault in the schools of our country lies in the professional weakness of our teachers." With the numberless normal schools and pedagogical departments of our universities, it is surprising to find such a large proportion of our teachers untrained, and more especially the teachers in our secondary schools. It shows a lamentable amount of ignorance on the part of boards of education as to what are the necessary qualifications for an instructor of youth. Of course, when a teacher is once in a position it is hard to get rid of her. A few marry; others die-but the poor teacher neither marries nor dies, and her "pull" keeps her in her place. It is poor and unwise economy to retain in office teachers who take no interest in their work. When teachers consider institutes and associations "a bore," then you may know that they are not teaching because they love their work, but they are teaching because it is a "decent business," or in the hope that "something more conducive to happiness" will result from it. In a high school of twenty-four teachers only eight were members of the county association; eleven did not take any school journal; seven had not read the report of the Committee of Ten; and ten had not read the report of the Committee of Fifteen-and this three months after the publication of the latter report. This is certainly a very bad showing for secondary teachers. Not to have read the literature that was written especially for them is surely unpardonable.

I recently made an investigation of the high schools, selecting the representative cities of the states, and found that 72 per cent. of the men teachers were college graduates and 30 per cent. of the women teachers—but there were 85 per cent. more women than men. President Schurman, of Cornell University, in a recent address said that of the teachers in this country only 15 per cent. were normal graduates, and that only 33½ per cent

were men. The average length of a teacher's term of service he placed at seven years.

Superintendent Nightingale, of Chicago, in an address before the Michigan Schoolmasters' Club, took high ground for the scholarly equipment of secondary teachers. He said: "The very minimum of preparation should be a college education—an education general in character, removed at least four years from high-school training; and, where circumstances may permit, I would add one year of resident graduate work along specified lines, and two years of study and travel abroad."

But there is no attraction in our profession for bright intellects—although we have many among us. "We find that it is merely used in many cases as an expedient to a better and more lucrative employment—not to say profession." A prominent lawyer in one of our western cities, who had been a very successful teacher, once said to me that nothing could induce him to go back to teaching, and he added: "It is far more satisfactory to go into the court room and meet one's equals."

There is a constant complaint on the part of teachers that the profession is not properly appreciated, but it certainly will not be until we make it worthy of appreciation. So long as the American standard remains so low that a graduate of a district school, without further preparation, is eligible for membership in the profession, a license to teach cannot command any special respect. The fact that "teachers' wages" is always used in the reports of the state superintendents is in itself a reflection on teaching as a profession.

The yearly scramble for position is something that ought to make people think twice before they enter the ranks of teachers, and this very thing has no doubt driven from among us many good men. In my investigation of which I made mention above, I found that only fifteen cities elected teachers for more than one year, and of these ten reported that they were elected "during good behavior." It is very evident that teachers in these cities can go off on their summer vacation and enjoy themselves. Some boards of education announce that teachers will be retained

¹United States Commissioner of Education.

on "fitness and merit," which has a very soothing effect upon the teachers, for every one feels that he or she has this "fitness and merit," but when the list is made up for the ensuing year many are surprised to find their names "dropped," and it puzzles the members of the board to make good their statement of retaining all upon "fitness and merit." Marcy's motto, "To the victors belong the spoils," has extended even to boards of education, and with every new board there is a redistribution of the "plums"—their friends must be taken care of.

· We shall have better teachers, better salaries, and greater permanency and tenure of office:

I. By state examinations.—I have only to cite the case of New York to prove my assertion. Uniform examinations for all the teachers in the state, issued by the state superintendent, have given teachers better in scholarship and methods, higher salaries, and a greater tenure of office. All the teachers are examined at the same time throughout the state, and all the papers are reviewed at the superintendent's office at Albany. The report of the superintendent for 1894 says that during the seven years that the system had been in operation forty thousand teachers had been refused certificates, and that during that year (1894) "one thousand different persons had been told that they did not possess the necessary literary qualifications to enter upon the work of teaching, and were thus debarred from entering the schoolroom as teachers."

2. By better normal schools.—By this I do not intend any serious reflection on our normal schools, but I mean that we need normal schools of a higher standard. The Albany State Normal College (New York) is an example of what I have in mind. This institution now does only professional work, and has power to grant degrees in pedagogy. As the normal schools now are, there is no inducement for a college graduate to take up professional work in them. If he does, he works at a great loss, for he is thrown in with students who have not the grasp and scope of reasoning that he has, and often he works under teachers who have not the scholarship that he himself possesses. The normal schools must have a "new birth." They must

establish a new basis of working, or the country will soon have no use for them. "Unhappily, experience shows that no part of the educational system is so prone to deteriorate and become not only sterile, but injurious; so that the normal schools need the most able supervision and inspection to protect them from the peculiar and insidious dangers inherent in the nature of their work."

We do not need more normal schools, but we do need more normal colleges—something that will give us real professional work and not spend three-fourths of the time on academic studies. The departments of pedagogy of our universities are doing grand work for the teaching profession, and it is to be hoped that all universities will soon have such departments.

- 3. By greater fraternity.—Teachers are not thoroughly organized. We need more organizations such as the Massachusetts Schoolmasters' Club, the Michigan Schoolmasters' Club, the New England Association of Colleges and Preparatory Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the Conference of Academic Principals of the State of New York, and the Regents' Convocation of the University of the State of New York. By means of these associations the standard of the teaching profession has been raised in the eastern states; more professional courtesy has resulted—a thing "devoutly to be wished" in many places.
- 4. By a reform in boards of education.— I found in the investigations which I made that the number of members of boards of education varied in the different cities from three to forty-five, but that the prevailing number was nine; that the prevailing term of office was three years; and that it was a rare thing for the term of office of all the members to expire at the same time. More than half reported that the members were elected by popular vote, and a large majority of these by wards. Seven reported that the board of education was elected by the city

² PRESIDENT G. STANLEY HALL. See also "The Case of the Public Schools," by Dr. Hall, in the Atlantic Monthly, March 1896, and by Dr. Atkinson in the April number of the same magazine; also "Teaching: A Trade or a Profession?" by PRESIDENT SCHURMAN, in the Forum, April 1896, which articles have appeared since this paper was prepared.

council, and seven that it was appointed by the mayor. I will mention a few. Boston has twenty-four members elected by popular vote, one-third retiring annually. Cambridge (Mass.) has sixteen, the mayor being a member ex officio. The others are elected by wards for three years, one-third retiring each year. Brooklyn (N. Y.) has forty-five appointed by the mayor for three years, one-third retiring each year. Albany (N. Y.) has seven on its board, appointed by the mayor for seven years, one retiring each year. Buffalo (N. Y.) has no board of education -the city council taking charge of the financial and legislative part, and the superintendent, who is elected by popular vote, looking after the administrative part of the system. Philadelphia has thirty-five members, appointed by the judges of the court to hold office for three years. Charleston (S. C.) has nine elected for life. Savannah (Ga.) has twelve members elected for life, with power to fill vacancies. New Orleans has twenty members elected for four years—twelve by the city council and eight by the State Board of Education. Chicago has twentyone appointed by the mayor, one-third retiring each year.

In nearly every case the boards have the power of appointing the teachers. One board asks the principals to recommend, and then wholly ignores these recommendations—like the Quaker, who said he asked the advice of his friends, and then did as he had a mind.

Boards of education should be elected from the city at large, and from the best men available, whose duties should be merely legislative, and who should leave the appointment of teachers—reserving the right to reject—in the hands of the superintendent, who should be an expert in all methods and details relating to the running of the schools. Until this "golden era" arrives teachers will be on the market every year. This is humiliating in the extreme. The annual scramble for position does not tend to give us better-trained teachers.

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HISTORY IN SECONDARY SCHOOLS

Any method to be employed in teaching history, like any method to be employed in teaching any other subject, must depend ultimately on the educational end towards which the teacher looks. And the educational aim of any one subject cannot properly be dissociated from the aim of education as a whole. Thus the value of any one subject as an educational factor will be great or small according as it helps strongly or feebly towards the main end of education. Now we take it that the great aim of education is "complete living," which means, in the last analysis, to be useful and to be happy. To be useful means to be of service to one's self and to others. When, then, the educational environment surrounding a man has resulted in developing his physical and mental abilities to their fullest capacity for service and has left him happy in their use, the highest and finest aim has been secured.

Accepting, then, service and happiness as our aims let us proceed to examine (I) what the possibility of attaining these aims rests on; (2) what value historical study may have when tested with these aims in view. It will then be clear (I) whether history should be taught at all, or not; (2) what method to employ in case we answer the first question in the affirmative.

Perfected capacity for service means power, but man does not submit to training, nor does he use his power when acquired, without some inducement. The possibilities of usefulness and happiness, therefore, depend on acquired power, and this in turn on incentives to effort. But the incentives furnished by any subject depend on its content, and the incentives furnished by the content cannot be made to act effectively unless permanent interest be aroused. Thus content and interest provide for us the tests by means of which we can determine educational values and decide upon our methods.

The subjects generally included in formal education are lit-

erature, history, philosophy, art, science, mathematics, and manual training. Of these the first four embody ethical ideals—"beauty, honor, duty, love"—these are the highest ideals of the race and furnish the most powerful incentives which have ever influenced human action. The other subjects have either no, or only slight ethical content, and, even when accompanied by interest, have never furnished stimuli for action at all comparable with those furnished by the first four. It seems clear, then, that history has a place in that set of subjects whose educational value is to be regarded as highest for the reason that they provide for us the highest incentives. It remains to consider what the particular content of history is, what incentives it contains, and finally how interest may be aroused and these incentives be brought to bear in order to develop power (i. e.,

capacity for service) and happiness.

History lacks the powerful imaginative content of literature, the rational content of philosophy, and the æsthetic ideals of art; but it is the story of human life with all its hopes, struggles, defeats, and victories; it sets before us the highest actual examples of honor, of courage, of self-denial, and of achievement; it involves the rise and fall of principles, the influence of environment, change of morals, the development of literature and art; it notes for us the relentless nature and the wide reach of the evil which dogs the steps of human error; it portrays the incessant struggle between right and wrong, and while leaving us in no doubt as to the final triumph of the former, warns us of the eternal necessity for vigilance. It seems needless to assert that a content like this is full of powerful incentives, nor does it seem possible that it can be lacking in interest, but the subject nevertheless has considerable difficulty pertaining to it, and too often fails to command permanent interest. This failure is mainly due to mistakes in methods, as we shall explain, but the inherent difficulty is, paradoxically, both an obstacle and an incentive, an incentive which in this case is more practical than ethical. To make this clear it will be necessary to examine the content of history more closely. This necessity is the greater inasmuch as we are persuaded that any

method not based on a consideration of the matter to which we refer, will fail to rouse interest and fail also to meet the inherent difficulty the subject presents.

The two most prominent forms of human reasoning are induction and deduction. The former proceeds from ascertained facts to incontestable generalization; the latter, dealing with certain premises, arrives at sure conclusions. But, while these are the most prominent, they are not by any means the most common forms of reasoning. By far the larger part of our reasoning deals with data of which we are not and cannot be sure, and arrives at conclusions which are only probable. Mr. Sully says: "The great region of probability is human action, the motives which determine it, and its results. It is always hazardous to say that man must have acted from a given motive; or that a certain plan of action, involving a cooperation of other minds, will in a particular case be followed by a definite result. This being so, reasoning about probabilities takes place by combining a number of considerations. In all such cases the mind is called on to consider a number of circumstances and the principle applicable to them, and to decide according to the preponderance of evidence on one side or the other, and in some cases even to suspend judgment altogether." This is illustrated forcibly in the region of personal conduct, which, if rational and wise, is only to be decided upon after consideration of attendant circumstances including the possibility of this or that result and the "comparative advantages and disadvantages of this or that course of action."

Now the content of history partakes of precisely this character. It deals with men, their deeds, and their motives. Even when the deeds and facts are certain the play of motive is obscure. We can never place ourselves in the exact environment of these men of the past, and therefore can never be sure of all which influenced them to their conclusions. All our reasoning concerning them is probable, as was also theirs concerning the data with which they had to do. They were men like ourselves and quite as hard to understand as our fellow-men today. Therein lies the difficulty of the subject, but therein lies also its

inestimable use as well as the possibility of an intensely human interest.

If the above be thoroughly understood it is no longer strange that young people so often fail to develop an interest in this subject. Successful reasoning on probabilities is only possible after the accumulation of sufficient data for comparison. Immature minds do not possess these data. Any attempt to force this side of historical study upon the young mind either too early or too fast simply defeats itself. A youth cannot become interested in what he cannot understand. Persistence in this effort will almost certainly cause a distaste which may be permanent and is sure to be hard to overcome. It is for this reason that with very young children the subject should be commenced in the form of stories and biographical sketches. As maturity increases the other and really valuable parts can be brought slowly forward with increasing interest and with rapid accumulation of power.

The fault of the ordinary method has been excessive reliance on mere memory. Facts whose relations are only dimly seen, if at all, cannot be easily held and would be of little value if they could, for they fail to develop interest. Such a method can never bring to bear the strong incentives the subject contains and therefore can never help to the accumulation of power.

The present condition of the subject is chaotic. It is taught unscientifically, at wrong times, and not continuously enough to permit of bringing its incentives to bear effectively. It may be advantageously begun (in the form of stories and biographical sketches) when the child begins to read and should be continuous, or recurrent, in this form up to the age of ten or twelve. This is the period for collecting data, not yet correlated, of course, for the child is young, but full of inspiring ideals chiefly ethical in character. When the age above mentioned is reached the method of instruction should commence to change. The child is now mature enough to form and express opinions of some value and to enjoy doing it. This is the period during which training in probable reasoning and the formation of opinions should go on. When the student has arrived at the time

for leaving the secondary school his mind has very nearly reached the limits of its physical growth and the period for original investigation and comparative study has arrived. It is to considerations of methods as applied to the second of these periods that the balance of this paper is to be devoted.

Detailed methods of teaching will, of course, depend on the immediate result sought. In this case the ends are four: (1) To provide information, (2) to rouse interest, (3) to develop incentives, and (4) to accumulate power. So far as the general process is concerned, it may proceed in two ways-extensively or intensively. The former method avoids details and aims at broad views. The facts it deals with are prominent, their relations easily seen, and the generalization to be drawn fairly plain. It gives the outlines of the picture which later and more intensive study can fill in. This is the method to begin with. It is, further, the main method to be followed during this whole period. Intensive study is the main characteristic of college and university work, but it is not to be wholly omitted in the period we are considering. In the latter part of secondary school work, when accumulated data, increased maturity, and practice in comparison warrant, some portion of the historical field should be selected and examined in detail. The student is in this way approaching the methods of genuine historical research, all the incentives the subject can furnish begin to come into play, and the keenest interest is aroused as power increases.

Work like this cannot be done without proper materials. No single text-book should be relied upon; a variety should be within the student's reach. Standard authorities should also be available, and copies of original documents so far as they can be procured. Atlases, maps, outline maps, photographs, and other illustrative materials should be provided in sufficient quantities.

We are now prepared to explain the details of the method. For the sake of clearness we will take a concrete example. We will suppose the class to be at work upon that part of Roman history included under the topic of "The Second Punic War." The arrangement of subtopics and references in the pupil's note-

book, as obtained from his teacher, would stand somewhat as follows:

I. General Topic.\(^1\)—The Second Punic War. 1. Special Topic.\(^2\)—Events between the crossing of the Pyrenees and the battle of Cannae. A. References.\(^3\)—1. Text-books, Brief Histories: Allen, History of Rome, ch. 9; Church, Story of Carthage, Pt. 4, ch. 5-10; Creighton, History of Rome (Primer), ch. 3; Gilman, Story of Rome, ch. 10; Leighton, History of Rome, Anal. 18; Sheldon, General History, pp. 152-169. 2. Larger Histories: Arnold, History of Rome, Vol. III, ch. 43; Dodge, Great Captains, "Hannibal," ch. 11-27; How and Leigh, History of Rome, ch. 20, 21; Ihne, History of Rome, Vol. II, Book IV, ch. 8; Merivale, General History of Rome, ch. 19, 20; Momsen, History of Rome, Vol. II, Book III, ch. 4, 5; Shuchburgh, History of Rome, ch. 22, 23.

II. Topic for Special Written Work.4- The passage of the Alps.

III. Topic for Discussion.—Hannibal's reasons for not attacking Rome immediately after the battle of Trasymenus.

IV. Map Work.—Draw a map of Italy and locate on it: 1. Hannibal's route from the Alps to Cannae; 2. All the important places, towns, streams, and mountains concerned with the topic.

With these topics and references in hand, the pupil "reads up" in the various text-books, and makes his notes or abstracts from the references given. The atlases and maps help him to locate routes and fix places, while the illustrative material at his command aids his constructive imagination by enabling him to picture more clearly scenes, customs, and persons. If the work be properly done, he comes into class prepared for a test which will aim at accertaining not his memory mainly, but his power. This test may be somewhat as follows: (1) A rapid "quiz" on facts; (2) short abstracts of readings, read in class; (3) fluent recitations; (4) written recitations; (5) topical analysis; (6) discussion of doubtful points; (7) complete written exposition of some assigned topic. He is not likely to be called on all these points, but he will be ready on all, and all these forms will be in constant use in class work, the exact emphasis each day

^{*} That is, for the week, or fortnight, or other time spent on the topic.

² That is, for the day.

³The teacher points out the order of preference, and the pupil reads what time and circumstances permit.

⁴ To be written out before recitation and read in class (see 7 below).

depending on the character of the topic dealt with. Meanwhile teacher and classmates are watching, and, at the proper moments, criticising facts, reasoning, and language used.

The items of the above list will all doubtless be readily understood except perhaps (3) and (4). By "fluent recitation" is meant a complete statement given orally without interruption on the part of the teacher or classmates. By "written recitation" is meant a short exercise requiring some thought, written off-hand in the class on some subject given out as new at the time. Instances of subjects suitable for one or the other of these would be "The Passage of the Rhone," "The Battle of Cannae," "The Policy of the Cunctator," "The Conduct of the Roman Allies."

The example thus elaborated is extensive in character, but the method which it illustrates is applicable to both extensive and intensive study, the difference being that in the latter case the investigation is more minute and the criticism more searching.

We maintain that such a method has the following advantages: (1) It fixes facts easily and firmly because their relations are appreciated; (2) it develops the student's power of exact and lucid oral and written expression; (3) it teaches him to use books, to collect, compare, and arrange data; (4) it gives constant training in the art of balancing probabilities, and thus enables him to form opinions which are not only intelligent but also intelligible and defensible; and (5) finally and chiefly, all the powerful incentives of the subject are brought to bear upon him in the most effective way.

Such advantages, since they mean a large increase in the exact kind of power (i. e. capacity for service) needed in all the relations of life, can only end in greater usefulness and happiness, and these assist in reaching what we began by asserting to be the ultimate end of education—" complete living."

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SECONDARY EDUCATION IN THE UNITED STATES 1

AN HISTORICAL SKETCH

III. THE HIGH SCHOOL PERIOD 2

THE pioneer institution of the high school movement in this country, the English High School of Boston, was known at the first as the English Classical School. The history of its present title will be discussed later in this article. An alternative designation, which appears in the history of numerous other schools of this type, is that of "Union School." This title will be considered in connection with the development of state systems of secondary schools. Still another title which has been applied in some instances is that of "Free Academy." This hints at a close connection in thought between the high school and its immediate predecessor, the academy. The New York City College was known at first as the Free Academy. The high school at Albany bore the same title till 1873. The term free in this case seems to refer to gratuity of instruction.3 The memorial presented to the state legislature by the board of education of the city of New York, in 1847, relative to the establishment of a free academy, states that "one object of the proposed free institution is to create an additional interest in, and more completely popularize the Common Schools. It is believed that they will be regarded with additional favor, and attended with increased satisfaction, when the pupils and their parents feel that the children who have received their primary education in these schools can be admitted to all the benefits and advantages furnished by the

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^{*}Continued from September number, 1898.

³Yet the Norristown (Connecticut) Free Academy requires, or 'did require until recently, the payment of a small tuition fee. It is not an ordinary high school, being a chartered and endowed institution. Dr. Steiner says of this school that it "better than almost any other in the State, combines the good features of the old academy with those of the new high school."— The History of Education in Connecticut, p. 53.

best endowed college in the state without any expense whatever." ¹

In 1818 Boston had established, in addition to the several schools enumerated in Winterbotham's historical account, a system of primary schools. In 1820, steps were taken looking to an extension of the school system upward, in an institution planned with reference to the needs of those pupils who were not destined for the classical course of the Latin School. On the forty-fifth anniversary of the battle of Bunker Hill, the School Committee having under consideration the question of appointments and salaries in the Latin School for the ensuing year, Mr. S. A. Wells introduced a number of resolutions relating, in part, to the establishment of an "English Classical School." This part of the resolution was referred to a sub-committee, which reported October 26 of the same year. On this date the School Committee voted "that it is expedient to establish an English Classical School in the Town of Boston." At a subsequent meeting the Selectmen of the town were requested to call a town meeting for the consideration of the sub-committee's report as amended by the School Committee. A town meeting was accordingly held on January 15, 1821, at which the plan outlined in the report was debated, and finally adopted with only three dissenting votes.

The Boston Advertiser of January 13, 1821, had sounded a note of caution in the following paragraph:

A town meeting is to be holden on Monday next, to act, among other things, on the proposition for establishing what is called an *English Classical School*. We trust that a measure of this sort will not be adopted without due consideration. It ought to be considered what will be the effect of it on the existing English Grammar Schools, and also on the Latin Grammar School. Will not its effect be to degrade the former institutions, by transferring the more liberal studies now pursued in them, and for which they are, or ought to be, fully competent, to a single school more favored by the public. And is it not the intention of some of the friends of the new school

BOESE, Public Education in the City of New York, p. 75.

² I am indebted to Mr. George H. Martin, supervisor of public schools, Boston, and author of *The Evolution of the Massachusetts Public School System*, for the opportunity of using the MS. records of the Boston School Committee in preparing this account.

to withdraw a portion of the patronage which is now bestowed on the Latin School?

But the nearly unanimous vote to establish the school seems to show that the consideration of these doubts resulted in sweeping them aside.

The same town meeting passed a second vote, "That the School Committee from year to year be, and hereby are instructed to revise the course of studies proposed in the report this day made and accepted for the new school, and adopt such measures as experience shall dictate, and the object of its establishment require."

The sub-committee's report, presumably as amended and presented to the town meeting, stands as follows on the records of the School Committee:

REPORT

Though the present system of public education, and the munificence with which it is supported, are highly beneficial and honorable to the Town; yet in the opinion of the Committee, it is susceptible of a greater degree of perfection and usefulness, without materially augmenting the weight of the public burdens. Till recently, our system occupied a middle station: it neither commenced with the rudiments of education, nor extended to the higher branches of knowledge. This system was supported by the Town at a very great expense, and to be admitted to its advantages, certain preliminary qualifications were required at individual cost, which have the effect of excluding many children of the poor and unfortunate classes of the community from the benefits of a public education. The Town saw and felt this inconsistency in the plan, and have removed the defect by providing Schools in which the children of the poor can be fitted for admission into the public seminaries.

The present system, in the opinion of the Committee, requires still farther amendment. The studies that are pursued at the English grammar schools are merely elementary, and more time than is necessary is devoted to their acquisition. A scholar is admitted at seven, and is dismissed at fourteen years of age; thus seven years are expended in the acquisition of a degree of knowledge, which with ordinary diligence and a common capacity may be easily and perfectly acquired in five. If then, a boy remain the usual term, a large portion of the time will have been dly or uselessly expended, as he may have learned all that he may have been taught long before its expiration. This loss of time occurs at that interesting and critical period of life, when the habits and inclinations are forming by which the future character will be fixed and determined. This evil, therefore, should be removed, by enlarging the present system, not merely that the time now lost may be saved, but that those early habits of industry and application may be acquired, which are so essential in leading to a future life of virtue and usefulness.

Nor are these the only existing evils. The mode of education now adopted, and the branches of knowledge that are taught at our English grammar schools, are not sufficiently extensive, nor otherwise calculated to bring the powers of the mind into operation nor to qualify a youth to fill usefully and respectably many of those stations, both public and private, in which he may be placed. A parent who wishes to give a child an education that shall fit him for active life, and shall serve as a foundation for eminence in his profession, whether Mercantile or Mechanical, is under the necessity of giving him a different education from any which our public schools can now furnish. Hence many children are separated from their parents and sent to private academies in this vicinity, to acquire that instruction which cannot be obtained at the public seminaries. Thus, many parents, who contribute largely to the support of these institutions, are subjected to heavy expense for the same object, in other towns.

The Committee, for these and many other weighty considerations that might be offered, and in order to render the present system of public education more nearly perfect, are of opinion, that an additional School is required. They therefore, recommend the founding of a seminary which shall be called the English Classical School, and submit the following as a general outline of a plan for its organization and of the course of studies to be pursued:

1st. That the term of time for pursuing the course of studies proposed be three years.

2ndly. That the School be divided into three classes, and one year be assigned to the studies of each class.

3rdly. That the age of admission be not less than twelve years.

4thly. That the School be for Boys exclusively.

5thly. That candidates for admission be proposed on a given day annually; but scholars with suitable qualifications may be admitted at any intermediate time to an advanced standing.

6thly. That candidates for admission shall be subject to a strict examination, in such manner as the School Committee may direct, to ascertain their qualifications according to these rules.

7thly. That it be required of every candidate, to qualify him for admission, that he be well acquainted with reading, writing, English grammar in all its branches, and arithmetic as far as simple proportion.

8thly. That it be required of the Masters and Ushers, as a necessary qualification, that they shall have been regularly educated at some University.

The Studies of the First Class to be as follows;

Composition.

Reading from the most approved authors.

Exercises in Criticism; comprising critical analyses of the language, grammar, and style of the best English authors, their errors & beauties.

Declamation.

Geography.

Arithmetic continued.

The Studies of the Second Class.

Composition.

Reading.

Exercises in Criticism.

Declamation.

Algebra.

Ancient and Modern History and Chronology.

Logic.

Geometry.

Plane Trigonometry; and its application to mensuration of

Heights and Distances.

Navigation.

Surveying.

Mensuration of Superficies & Solids.

Forensic Discussions.

The Studies of the Third Class.

Composition;

Exercises in Criticism;

Declamation;

Mathematics;

Logic;

History; particularly that of the United States;

Natural Philosophy, including Astronomy;

Moral and Political Philosophy.

[A financial statement follows, in which it is proposed that \$4000 yearly be spent on the school to support a Master, submaster, and two ushers. The report then closes with general considerations relating to the usefulness of public schools.]

The school opened in May 1821, with Mr. George Barrell Emerson as principal master, and a membership of over one hundred pupils.

It was decided, "That the third story of the new School-house in Derne Street be appropriated for the present to the use of the English Classical School." Three years later, June 23, 1824, "it was Voted that the schoolhouse which the city is now building on Pinckney Street be appropriated to the use and accommodation of the English High School:—that the Grammar School, on Derne Street, be hereafter called and known by the name of the Bowdoin School; and that the vote of 11th May, giving that name to the house on Pinckney St. be repealed."

ELMER E. BROWN

Continued

(To be continued)

A REPORT OF PROGRESS OF THE COMMITTEES OF THE DEPARTMENT OF NATURAL SCIENCE, N. E. A.

In July 1895, at the Denver meeting of the N. E. A., the department of natural science was organized. At the Buffalo meeting, 1896, the executive committee of the department was instructed to take steps for the organization of a large national committee to consider the ways and means for improving the natural science work of high and preparatory schools, with special view to college requirements; this committee to have official connection as a branch of the "Committee of Ten" of the N. E. A. To this end invitations were extended to the following associations to nominate each a set of five representatives, one each in physical geography, physics, chemistry, biology (or zoölogy), and botany. The associations are the New England Association of Colleges and Preparatory Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the North Central Association of Colleges and Secondary Schools, the Southern Association of Colleges, the American Association for the Advancement of Science, and the Department of Natural Science, N. E. A. Each of these responded with more or less promptness. Representatives of all the associations met with us at Milwaukee in 1897. Very hurried and incomplete meetings were held, and the following names were selected and officially appointed to serve, each as chairman of the persons representing his respective subject, viz.: physics, Professor Edwin H. Hall, Cambridge, Mass. (Harvard); chemistry, Professor Alexander Smith, Chicago, Ill. (University of Chicago); zoölogy, Professor Herbert B. Ward, Lincoln, Neb. (University of Nebraska); botany, Professor John M. Coulter, Chicago, Ill. (University of Chicago); physical geography, Professor A. P. Brigham, Hamilton, N. Y. (Colgate University).

There was some comment because, in the full list of the various committees, by far the larger number of names were from colleges, the high and preparatory schools having but slight representation; it was therefore voted that the representation from each association should be doubled, thus giving one college and one high school man in each specialty.

This task was attempted and has been partly accomplished; it is hoped that the full set of names of the "Committee of Sixty" can be published shortly. But much delay has been experienced, and several lessons have been learned. Firstly, it is imposible to get a large, unwieldy committee to work together—or indeed to work at all as a committee. They will not all gather at any one place—indeed they will hardly answer letters; but, secondly, the attempt to organize such a large, unwieldy committee has resulted in catching, as with a large drag net, the names of the few genuine, able enthusiasts in their special subjects.

Thus, although it has taken several years, we have this to report, viz., the picking out of a small set of earnest, capable men, selected from a really national representation, and now getting well organized for the real work for which all this trouble has been taken. It goes without saying that the committee is organized to work on indefinitely until they shall accomplish something definite and valuable. The committee will make a report in 1898 at Washington. This report cannot be final, for they have not yet had an opportunity to communicate with all of the names in their respective specialties, these having not yet been given in full to the corresponding secretary. But the men now serving are men to be trusted with the work. They will find that it takes time to know what is best to be done; that it takes more time to bring about a harmonious and practically unanimous adjustment of the claims and rights of the various specialties, and that it takes still more time to effect the adoption and accomplishment of the ideal courses, when they shall have been defined and coördinated, not only with each other, but also with the languages, mathematics, history, English, etc., which must appear in all preparatory courses.

Therefore let us be patient and give the committee all the time they need. It has taken an immense amount of labor and planning to bring them together. Let us not ask for any premature, ill-considered, snap-judgment report. They represent institutions of many types and varying characteristics from all parts of the country.

It is feared that this tedious report may seem at first glance to speak no progress and to call merely for more time without reason. It is not so. A great fermentation is going on. We are all changing our views more or less rapidly, and any report that the committee could give now would probably not satisfy us in a year. Let us therefore all wait a little, and meanwhile let us all prepare our minds to help the committee.

It is not for any of us to dictate to the committee in any way, nor to anticipate their special and combined reports; but it may not be inappropriate to discuss briefly some of the tendencies of the times which the committee are sure to meet as they continue their work; tendencies which they must inevitably consider if they would shape their reports for the greatest permanency of value; and these same tendencies we must all consider if we would prepare ourselves for the reports as they shall appear.

CHARLES SKEELE PALMER
Cor. Sec., Com. of the Dept. Nat.
Sci. Teaching, N. E. A.

BOULDER, COLORADO

BOOK REVIEWS

L'Évolution de l'Éducation dans les diverses races humaines. By Ch. Letourneau. Paris; Vigot Frères, 1898. Pp. xviii + 617.

This volume, Tome XIX of the Bibliothèque Anthropologique, and the sixteenth by this prolific author, is one which a reader takes up with pleasure, peruses with slowly decreasing interest, and finally lays down with disappointment. "L'éducation," the author says in the first chapter, "c'est l'art de déveloper l'être humain dans tel ou tel sens, de le doter d'aptitudes, de qualités ou de défauts, qu' abandonné à lui-même il n'aurait pu acquérir." But the definition at once suggests to him the question of the influence of heredity, and hence of the general evolution of education, and it is this interesting field which he sets out to explore.

Beginning with the training of the lower animals, the author proceeds to discuss the development of education among the various savage types, Australasian, Negro, American Indian, Peruvian, and others, often setting forth very good summaries and always writing in an entertaining style. He then takes up the ancient civilizations, the Egyptian, Arab, Jewish, Greek, and Roman, and closes with three chapters devoted to mediæval and modern education and the outlook for the future.

For the mediæval education he has only condemnation, and his general style may be judged from this summary: "En somme rien n'est plus triste que toute cette pédagogie médioévale. Jamais système d'éducation ne fut à la fois plus faux et plus incomplet. L'éducation intellectuelle, l'instruction, à laquelle on a seulement pensé, est tout aussi vicieuse. Elle est purement mnémonique; il ne s'agit pas de stimuler l'intelligence et de lui donner, comme aliment, un savoir sérieux et solide."

Modern education is discussed from a standpoint much more onesided, even, than that taken by Compayré. Of contributors outside of France the author seems almost wholly ignorant. Comenius has a few lines, but there is not a word concerning Pestalozzi and Froebel, while the relation of Herbart to modern educational thought seems never to have come to M. Letourneau's attention.

The value of the closing chapter, in which the education of the future is treated, may therefore be inferred. Of America, speaking of the struggle for wealth, he has this to say: "En Amérique, on le criesur les toits, et la vénération pour le dollar est devenue une religion." This, with a few remarks on "le Décalogue du dollar," expresses his view of us.

It is in part the influence of works of this narrow character which keeps French primary education where it is, in a rut. Here is what professes to be a history, somewhat supplementary to Compayré; and yet it is written by a man who apparently has no access to German or Italian literature, and hence it is narrow in its view, harmful in its bias, and valueless in its bibliography.

What a contrast with a work like Schmid's Geschichte der Erziehung, the new Zweite Abteilung of the Vierter Band of which arrived by the same express with Letourneau!

DAVID EUGENE SMITH

STATE NORMAL SCHOOL, Brockport, N. Y.

Les Femmes dans la Science. Par A. Rebière. Pp. 359 + ix. Paris: Nony & Cle, 1897. 7 fr.

For those who are interested in the historical development of mathematics, and who recognize that upon occasion "the clock of time ticks drowsily behind the door and trifles become the amusement of the great and wise," this latest volume of M. Rebière will be a delight. Such a work was also his *Mathématiques et Mathématiciens*, which appeared a few years since—a book for a hammock in summer or an easy chair by the fireplace in winter. Mathematical readers have for some time been aware that the author's brochure which appeared some three years ago under the same title, *Les Femmes dans la Science*, was in process of expansion, and so the present work cannot fail of immediate and generous reception.

The plan is, however, quite different from that adopted in the conference before the Circle Saint-Simon, which formed the original edition. In the present work the encyclopædic arrangement is followed, the names appearing alphabetically. To this biographical matter 285 pages are devoted. This is followed by two interesting notes. In the

first he considers the question, "La femme est-elle capable de science?" To it he devotes thirty pages of quotations from various savants, known and unknown. While his sympathies are entirely with woman in science, he gives fair expression to both sides of the argument. Indeed, he opens the discussion by saying that such writers as Molière, Boileau, Joseph de Maistre, Proudhon, Schopenhauer, and many others, emphatically assent that woman is not capable of scientific attainments. It goes without saying that this kaleidoscope of opinions is anything but monotonous. It is rather interesting to note, however, that no mention is made of the opinion of Cantor, perhaps the world's greatest historian of mathematics, whose views of woman's achievements in the sciences are not very optimistic.

The second note, of thirty-five pages, is a scrapbook of miscellaneous quotations upon the subject. While impossible to classify the matter, the author has roughly arranged it under the topics (a) "Notules diverses, historiques, philosophiques," etc.; (b) "Pensées sur le sujet;" (c) "Anecdotes;" and (d) "Boutardes et paradoxes."

The work is embellished by twenty-five portraits, largely reproductions from contemporary line engravings and lithographs, and by half a dozen autograph letters.

In the way of selection, the author has included the name of every woman, apparently, who has sustained even remotest relation to science. Yet, while his generosity in this respect may be criticised, it cannot be denied that the book is so much the more valuable for reference. One is not obliged to read about the trivial contributions of unknown writers unless he wishes. On the other hand, in looking up the work of a woman like Mme. de Châtelet he will find a good résumé of her achievements, together with an excellent bibliography.

Of course, as in all continental works, the English and American names are often almost unrecognizable. Thus we have Professor Achsah, Mount Ely, among the A's as Achah Mount-Ely; Indianola, Iowa, appears as Indianapolis, Illinois, and the wife of the man who first made Laplace known in America is concealed under the name Boodwitch. But these blemishes are so common in French, German, and Italian works that they hardly attract attention. With all its faults the book is delightful reading, and will be appreciated by all who delve in the fields of mathematical history.

DAVID EUGENE SMITH

BROCKPORT (N. Y.) STATE NORMAL SCHOOL

COMMUNICATIONS

Editor School Review

DEAR SIR:—I have been a reader of the SCHOOL REVIEW from the time of its first publication, and have followed with much interest the discussions on the various phases of secondary-school work. I have been especially interested in the articles relating to courses of study in the high schools.

In the October number of the Review I notice an article by Mr. J. H. Harris outlining a proposed course of study which seems to me open to very serious criticism.

The points which I especially notice are: (1) the inadequate time given to some important subjects, and (2) the lack of economy in time.

Under the first head I notice that only one half year is given to the following subjects: botany, physical geography, physiology, Greek and Roman history, mediæval and modern history, zoölogy, astronomy, geology, civil government, political economy, psychology, and trigonometry.

For some of these subjects one half year may be sufficient if the pupils have been previously well founded in the related subjects which naturally precede. For example, after a thorough course in algebra and geometry a good idea of trigonometry could be gained in that time. Likewise, after a thorough course in zoölogy, physiology, and psychology might well occupy only one half year each.

But the attempt to gain any adequate knowledge of Greek and Roman history, or of mediæval and modern history, or of zoölogy, or botany, if laboratory work is to be done, seems to me doomed to failure. I believe that the interests of the pupils will be much better subserved by reducing the number of options and increasing the time devoted to each.

We find three periods per week for one year none too much for each of the following subjects: Greek history with its oriental connections, Roman history, zoölogy, and botany. Indeed, there is no subject in our course, except drawing and rhetoric which receives less time than that.

The lack of economy in time is apparent when we consider that the course proposed by Mr. Harris calls for about 170 hours of recitation work, if arranged in the most economical way, and no division of classes is required. The work could not possibly be done well with a corps of teachers numbering less than seven. What of the many high schools having a smaller teaching force than this? Shall they attempt such a course as this or reduce the number of options?

In the school with which I am connected the number of students ranges from 105 to 125, and there are five teachers, not counting the teacher of

music and drawing. I inclose a copy of the course of study now in operation which, you will observe, allows considerable choice in electives and calls for only 116 hours of recitation work when classes are not divided. At present eighteen hours more are required for divisions, making 134 hours in all.

I do not present this as an ideal course, but as the best we can do under present conditions. With a larger teaching force I would add more electives as shown in the proposed course which I inclose on another sheet.

I am a firm believer in electives, but not in electives run mad.

Sincerely yours,

M. C. SMART

PROPOSED COURSE OF STUDY

FIRST YEAR (FRESHMAN)

	REQUIRED Hour per wer					r same as now)						Hours per week		
			,		*	(Ѕорном	,	(3		4.1				
Geometry,					3	Latin,		-,			-	5		
English,	_	_		_	3	Greek,		_	_			5		
Roman histo	F 37			_	3	French,						5		
Music, -	ay,	_			3	Botany,		_				5		
music,			-			Comme		llaw	and	husin	229	5		
					correspondence,					+	-	5		
				THIRI	D YE	AR (JUNIO	R)							
English,	-	-	-	-	3	Latin,	_	-				5		
Physics,	and a			3 (6.7	Greek,		-		-	-	5		
Music, -	4-	-14	-	-		French,	-	-	-	-	-	5		
						German		40	-	-		5		
						Algebra	an	d geo	metry	7		. 5		
						English		0				3		
						Type writing and stenography								
						Physica		-		-	-	5		
			I	OURT	н Үе	AR (SENIC	OR)							
English,			-		3	Latin,	-	-	-	-	-	5		
Music, -		•	-		I	Greek,	-	-	-	-	-	5		
						French,			-			5		
						German	,	-	-	-		5		
				Solid geometry and trig'm'							ry,	5		
						American history and civic					, .	5		
						Chemist	ry,	-	-	-	3 0	or 5		
						Rhetorie	С,		-		-	2		
						Physiolo	ogy	and p	osych	ology	-	5		

COURSE OF STUDY IN OPERATION IN STEVENS HIGH SCHOOL

FIRST YEAR (FRESHMAN)

	PRESCRIBED			Hour per we		ELECTIVE					Hours per week		
Elementary	alge	bra,	-	-	5	Latin, -	-	-	-	-	5		
English,	-	-		-	3	Bookkeeping	g. 3)						
Greek histor	ry,	-	~	-	3	and	}	-	~	~	5		
Zoölogy,			-		3	Drawing,	2)					
Music, -	-	-	-	-	1								
			SEC	COND Y	EAR	(Sophomore)						
Geometry,	-	-	-	-	3	Latin, -			-		5		
English,	-	-			3	Greek, -	-	-	~	-	5		
Roman histo	ory,	-	-	-	3	French, -	-		-		5		
Music, -		-		۰	I	Botany, English ext	ra,	3 {	-		5		
				THIRD	YE.	AR (JUNIOR)							
English,	-	-	-		3	Latin, -	-				5		
Physics,		-		5 or	3	Greek, -		-	-		5		
Music, -	-	-	-	-	I	French, -	-	-	-	-	5		
						Algebra and	-		- 11	-	3		
				•		English his	tory,	-	- ,	-	3		
			I	COURTE	YE	AR (SENIOR)			and a				
English,	-	-	-	-	3	Latin, -	-	-	-		5		
Music, -			-		1	Greek, -	-	-	-		5		
						French, -	-	-	-	-	5		
						Solid geome	etry a	and tri	g'm'tr	y,	3		
						American h	istor	y and	civics,	-	3		
						Chemistry,	-	-	-	5	or 3		
						Rhetoric,		-	-		2		

Twenty exercises per week required.

To the Editor of the School Review.

SIR: —One is always pleased to add to his store of useful knowledge, even if it be no more than a definition. In the last number of the School Review there was an article which gave a new content to an old term that we believed was familiar. By telling what the "Philistines" do we are by easy steps led to infer what they are. And what is the "victory" they have won in Minneapolis, and what are their methods?

"They have reduced the teaching force in the high schools one-fourth." Why one-fourth should have been used instead of less than one-fifth, as it

actually is, is a little difficult to determine; for if one wished to be poetic, he might have used "one-half" or "nearly all" with better effect. What are the facts? A number of years ago the board of education of this city passed a resolution that the teachers in the high schools should be apportioned on the basis of one for every thirty pupils in attendance. Unconsciously there had grown up a change in this ratio, until last year it was found to be one teacher for less than twenty pupils. Such a condition may be ideal for both pupils and teachers, but in the stress of financial conditions it was necessary to go back toward the old rule. As this ratio of one to thirty is a trifle smaller than the average of the large cities, over the states, it would seem that there really is a great and glorious company of Philistines scattered through our progressive communities who are guarding against expensive tendencies, and seeking the greatest good for all.

And "they have taken the schools from the high schools list of the state, and at the same time have assumed to charge tuition for non-resident pupils and those over twenty-one years of age." Four years ago the Minneapolis schools were placed upon this list, and in that time the number of non-resident pupils had grown to 260. This fact attests the high estimate placed upon these schools by the people about the state. On the ratio of thirty pupils to a teacher these non-residents were demanding nine extra teachers. Nine teachers earn \$8000. It seemed wise to the board at this time to ask those who contributed nothing to the support of the schools to pay the actual cost of instruction, or \$40 a year. In order to do this it was necessary to drop from the high-school list, as the high schools board have expressly provided that all schools which draw the \$400 shall admit all pupils free of tuition. It may be Philistine to care for the children of one's own community and family before he looks to the interest of all his neighbors' children; but if it be so, the Philistines have one human characteristic.

Moreover, "they have dropped Greek from the course of study." Whatever may be said in favor of Greek, and there are some things to be said, it must be admitted that Greek is losing its hold upon the masses of those who attend college. It is not more than fifty years since all degrees in this country were arts degrees. I am not sure that it is more than forty years. I have tried to get the facts from several representative colleges in regard to the ratio that classical students bear to the whole number in the college. I was disappointed not to be able to get more. But what I have are not selected; I took all there were in the University Library. The University of Michigan shows a slow and gradual change from 1885, when 52.6 per cent. of the graduating class were in the classical course, to 1897, when 34 per cent. were candidates for arts degrees. I have not included the professional schools in making up these percentages, as they have been organized more recently, and it would be manifestly unfair to add the number of graduates in these schools to the whole number of graduates, and it would make the later percentages very much smaller. In the University of Pennsylvania the change

is from 77 per cent. in 1885 to 19.3 per cent. in 1897. In Cornell, which has never been a strong classical school, the per cent, has been only 11.6 for the last eleven years. In the University of Minnesota the same tendency can be noted. From 1873, when the first class graduated, were all classical students, to 1885, 37.4 per cent. of the graduates took Bachelor of Arts degrees. From 1886 to 1890, inclusive, 20 per cent.; from 1891 to 1895, 26 per cent.; in 1896, 24 per cent.; in 1897, 20 per cent.; in 1898, 13.5 per cent. I believe this fairly represents the tendency of modern scholarship in this country. At Harvard, however, the conditions are even more marked than in other schools. Whether the management has been a little radical and unwisely thrown away many of the traditions of the fathers, or whether he has seen with a prophet's eye and accepted the teaching of history, I do not pretend to say. This we know, that in the last graduating class, the classics, including both Greek and Latin, had but fourteen pupils studying them, and that they ranked fiftieth in popularity in that class; even French, German, Italian, and Spanish ranking above them and scarcely anything below. Only 16 per cent. of those who began the study of the classics persisted; while only eight said at the end of their course that they were glad they had taken the classics, and twenty of those who had taken the course regretted their choice. This condition is entirely consistent with the report made to the board of overseers by Charles Francis Adams, E. L. Godkin, and George R. Nutter. They say "the old generation-the masters of the old school-as their criticisms on the changes introduced into the system to which they were accustomed clearly showed, could only in rare individual instances adapt themselves to the new order of things, or appreciate either its significance or its necessity. It is enough to say that it manifestly aims at nothing less than elevating the study of English to the same plane of dignity which has for centuries been the peculiar attribute of the classic tongues. Their exclusiveness in the domain of advanced education is challenged; and a race of young instructors is now at work, whose influence has only begun to make itself felt, but will in the end be little less than revolutionary."

And, then, look for a moment at the record in the high schools of the state. I take all the figures from the "Fifth Annual Report of the State Inspector of High Schools." The enrollment has increased from 9402 in 1894-5 to 11,377 in 1897-8. The number of schools teaching Greek has changed from twenty-two in 1894-5 to seventeen in 1897-8; and this decrease does not include the four schools in Minneapolis which are not teaching Greek this year. The number of pupils studying Greek did not materially change from 1894 to 1898, being 214 and 215, respectively, although the attendance increased 21 per cent. The number of pupils studying Greek was less than 2 per cent. of the pupils attending high schools. To teach this small number of pupils was an expensive luxury, in some cases reaching \$100 a pupil. As a saving was a necessity, and as the facts indicated that the least damage, if any, would be done by cutting out Greek, it was done. And this, forsooth,

is Philistine, to deprive a few of what may be of advantage to them, or may not, in order that the many may have what is essential.

From what he has done, then, what may we infer that a Philistine is? He is one of a large company who lop off extravagant growths where they have shown themselves; he is a man of such marked human feelings that he prefers to care for his own children rather than those of his neighbors; he is one of the few who can recognize tendencies in the growth of an institution, and then has the courage to conform to them, without asking the consent of those few who set themselves as censors of the duties of others. "I thank thee, sir, for teaching me that word."

W. F. WEBSTER

EAST HIGH SCHOOL, Minneapolis

[It is a pleasure to be able to publish so complete a justification of our editorial in the October number. Mr. Webster does not claim that there was a single misstatement in that editorial. He simply thinks that what was done was right. We could wish that he had been more specific concerning "those few who set themselves as censors of the duties of others." Apparently he means those who do not agree with him, but, if this is the case, we venture the criticism that the word "few" is ill-chosen.— EDITOR SCHOOL REVIEW.]

To the Editor of the School Review.

DEAR SIR:—As the problem of rhetoricals is ofttimes a puzzling one to principals, I have thought that the following experiment, which we are trying in our school with much satisfaction to teachers and pupils alike, might be of interest to other secondary-school workers.

For rhetorical purposes we have divided the entire high school into twelve divisions, corresponding to the number of teachers of whom this kind of work may reasonably be demanded. These divisions, consisting of about thirty-three pupils each, meet once a week—Wednesdays—with their respective teachers for exercise and drill along the following lines and in accordance with the following fixed schedule:

On the first Wednesday in each month, the period is given, in the ninth and tenth grades, to an exercise in spelling. The word-list is made up of words actually misspelled in essays, examination papers, etc., and is contributed to by all the teachers. In the eleventh and twelfth grades this first Wednesday is given either to an exercise in spelling or in pronunciation—preferably the latter. For this purpose words mispronounced in oral recitations, in reading, etc., are used as well as many taken from that excellent little manual Seven Thousand Words Often Mispronounced.

It is true, of course, that an exercise but once a month along these two lines is inconsiderable, but it is certainly far better than nothing at all and must have a tendency to improve the general tone of the school in respect to the primary arts of spelling and pronunciation.

The indirect benefit, we find, is even greater than the direct, and in calling specific attention to these matters a general interest in them is stimulated, and the keenness with which mispronounced or misspelled words are brought to book is very marked and is ample proof of the interest aroused in the accurate use of English.

The second Wednesday of the month is given in all grades to an exercise in reading aloud. The design of this is not to teach elocution—save as elocution is the most natural and most effective method of expression in reading or speaking—but it is designed to drill pupils in the art of reading clearly and expressively; of reading with appreciation and interest what is to be read; of pronouncing correctly and articulating distinctly; of winning and holding the attention and interest of the listeners. We believe this to be a most valuable exercise, and while, as has been said, we have no thought whatever of making elocutionists of our pupils, we do aim to interest them in the arts of appreciative reading and adequate expression.

The third Wednesday is devoted to a discussion of some current question, and may assume the form either of a debate or of the mere presentation of some important event, foreign or domestic. Some specific topic or topics are assigned to two or three members of the division for special preparation, and while in connection with the prepared work, short impromptu talks on the subject in hand may be expected of any. By this exercise interest is aroused in topics of current importance, the current periodicals are read with more zest and accuracy, drill in debate and in extempore speaking is secured and the habit of forming opinions and expressing them forcefully is cultivated.

This period has been found very profitable and has excited the lively interest of the pupils.

The fourth Wednesday is given to rhetoricals proper: that is, to the delivery of recitations, declamations and orations. By this exercise the more formal drill in rhetoricals is secured and practice is given in the more pretentious forms of public speaking. In the selection of recitations and declamations, too, for memorizing, an effort is made to give the pupils material which will prove of positive culture value and be a perpetual source of intellectual satisfaction.

This plan, of course, in no way supersedes the work done in our regular English classes, and is designed merely to supplement that work along certain kindred lines which exacting demands and inevitable limitations of time render difficult of performance.

From time to time, too, we have more elaborate exercises in the large assembly rooms where those who have special abilities along the line of public performance may share in an interesting and profitable program.

By this schedule, then, we have aimed not only to cover the ground

ordinarily included in rhetoricals, but to broaden it in such a way as to make it effective in allied fields.

We certainly feel that our rhetorical work now stands for something tangible, and so far as interest is concerned, both on the part of teachers and pupils, there is no comparison with the former conventional method.

J. H. HARRIS

BAY CITY, MICH. November 19, 1898

COURSE OF STUDY FOR HIGH SCHOOLS

(Adopted by the General Conference of Louisiana High School Teachers)

HISTORY AND CIVICS

FIRST YEAR - First Half

- United States History, from close of Revolution, 3 recitations per week Louisiana History, - - 1 recitation per week Local History, - - 1 " per month.
 - Supplementary reading: Some representative Life of Washington, preferably Hale's.

Second Half

- English History, - - 3 recitations per week.
 Civil Government, - 2 " per month.
 Current History, from newspapers, 1 recitation per month.
 - Supplementary reading: Life of Abraham Lincoln, preferably Tarbell's.

SECOND YEAR - First Half

- General History, to Mediæval period, 3 recitations per week.

 Mythology, preferably Guerber's, 1 recitation per week.
- Current History, preferably as given in Review of
 - Reviews, "Our Time" - 1 recitation per month.
 - Supplementary reading: Smith's History of the East as abridged in Harper's Students' Series, or Ragozin's Story of Chaldea.

Second Half

- - Supplementary reading: Guerber's Legends of the Middle Ages.

THIRD YEAR - First Half

- General History, modern period, - 2 recitations per week.

 Roman History, special study, - 2 '' per week.

 Current History, - - 1 recitation per month.
 - Supplementary reading: Life of Columbus.

Second Half

French History, special study, - - - 2 recitations per week.

Southern History, preferably Curry's Southern States

of the American Union, - - - 2 recitations per week.

Current History,

1 recitation per month.

Supplementary reading: Life of Napoleon Bonaparte, preferably McClure's (Tarbell's).

FOURTH YEAR - First Half

United States History, intensive study of one period of American development by collateral readings upon selected topics.

Supplementary reading: Grace King's New Orleans; the Place and the Peoble.

Second Half

Elementary Political Economy, preferably Ely's.

The foregoing presupposes a four years' High School Course, each year to consist of eight or nine months.

The order in which the several subjects are arranged is the order of importance, in the opinion of the undersigned, in reference to (1) essentials of historical information Louisiana youth should possess; (2) preparatory work for college admission, as based upon an examination of entrance requirements of every leading American college and university.

It will be noticed that the course of study provides for review work, although not specifically so stated. For instance, United States History, studied in the first half of the first year, is reviewed in the supplementary reading of the lives of Washington, Lincoln, and Columbus; and in the study of Curry's Southern States, etc. Greek history, as indicated in the general history work of the first half of the second year, is reviewed and elaborated by the special study of Greek history in the second half. Likewise Roman history.

Special place is given to French history (a subject injudiciously ignored in our high schools), as of particular importance to Lousiana students, the early history of our state being as intimately connected with the history of France as New England history is connected with that of Great Britain.

The preparer had also in view the making of the course complete, as far as it goes, to any division or subdivision. It does not require a completion of the whole course to get any benefit from it. Each year is distinct and complete, and something will be attained if the study is pursued for that year and for that year alone.

Such a course as outlined indicates the serious study of history; the elevating of the subject to its rightful position in the modern scheme of education. The accomplishment of the work as outlined should be equal to one-third of the requirement for admission to college.

HENRY E. CHAMBERS, Chairman Committee on History

APPROVED COURSE OF STUDY FOR HIGH SCHOOLS AND ACADEMIES IN THE STATE OF NEW YORK

THE legislature of 1895 enacted the following law:

CHAPTER 1031, LAWS OF 1895

An Act to encourage and to promote the professional training of teachers.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1.1 The board of education or the public school authorities of any city or of any village employing a superintendent of schools, may establish, maintain, direct, and control one or more schools or classes for the professional instruction and training of teachers in the principles of education and in the method of instruction for not less than thirty-eight weeks in each school year.

SEC. 2.º Towards the maintenance and support of these schools and classes established pursuant to this act, or heretofore established and maintained for similar purposes, and whose requirements for admission, and whose course of studies are made with the approval of the state superintendent of public instruction, and under whose direction such classes shall be conducted, the said superintendent is hereby authorized and directed in each year to set apart, to apportion, and to pay from the free school fund one dollar for each week of instruction of each pupil, and the sum of forty thousand dollars is hereby appropriated to carry out the provisions of this act until the close of the school year of eighteen hundred and ninety-seven. Such apportionment and payment shall be made upon the report of the local superintendent of schools filed with the state superintendent of public instruction, who shall draw his warrant upon the state treasurer for the amount apportioned.

SEC. 3. If the total sum to be apportioned and to be paid, as provided by section 2 of this act, shall in any one year exceed the said sum of one hundred thousand dollars, the said state superintendent of public instruction shall apportion to each school and class its *pro rata* of said sum upon the basis described in section 2 of this act.

SEC. 4. After January first, eighteen hundred and ninety-seven, no person shall be employed or licensed to teach in the primary or grammar schools of any city authorized by law to employ a superintendent of schools, who has not had successful experience in teaching for at least three years, or, in lieu

As amended by chapter 495, laws of 1897.

^a As amended by chapter 646, laws of 1896.

thereof, has not completed a three years' course in and graduated from a high school or academy having a course of study of not less than three years, approved by the state superintendent of public instruction, or from some institution of learning of equal or higher rank, approved by the same authority, and who, subsequently to such graduation, has not graduated from a school or class for the professional training of teachers, having a course of study of not less than thirty-eight weeks, approved by the state superintendent of public instruction. Nothing in this act shall be construed to restrict any board of education of any city from requiring such additional qualifications of teachers as said board may determine, nor shall the provisions of this act preclude the board of education of any city or village from accepting the diploma of any state normal and training school of the state of New York, or a state certificate obtained on examination, as an equivalent for the preparation in scholarship and professional training herein required.

SEC. 5. All acts and parts of acts inconsistent with this act are hereby repealed.

SEC. 6. This act shall take effect immediately.

In accordance with the above act State Superintendent Charles R. Skinner has issued the following approved course:

A course of study in a high school or academy to receive the approval of the state superintendent of public instruction, as required by chapter 1031 of the laws of 1895, entitled "An Act to encourage and promote the professional training of teachers," must include the following as a minimum requirement:

1. English. The course in English must include grammar rhetoric, and composition, and literature. Amount of time required: grammar, 100 hours 1 (a thorough course in grammar before entering the academic grades will be accepted as an equivalent to the 100 hours prescribed); rhetoric and composition, 200 hours; literature, 200 hours. The requirements of the Association of Schools and Colleges of the Middle States and Maryland for admission to college shall be the minimum standard for the work in literature.

2. History. The course in history must include American history, English history, Greek and Roman history, and civics. Amount of time required; American history, 200 hours (including 50 hours for the intensive study of some special period of American history); English history, 100 hours; Greek and Roman history, 100 hours; civics, 100 hours. Two hundred hours of American history in sub-academic grades will be accepted as an equivalent for 100 hours of the time above prescribed for this subject.

3. Mathematics. The course in mathematics must include a review of arithmetic, algebra through quadratics, and plane geometry. Amount of time

"The term "hour," as used in this course, means a recitation period of not less than 45 minutes.

required: arithmetic (review), 50 hours; algebra, 200 hours; plane geometry, 200 hours.

- 4. Science. The course in science must include physics, chemistry, physiography, botany, zoölogy, and physiology. Individual laboratory work is required. Amount of time required: physics, 200 hours; chemistry, 100 hours; physiography, 50 hours; botany, 50 hours; zoölogy, 50 hours; physiology, 50 hours. One hundred additional hours in advanced physics or advanced chemistry, or 50 hours in each subject, may be substituted for the work in botany and zoölogy.
- 5. Foreign Languages. The course in foreign languages must include either Latin or French or German. Amount of time required: Latin, 400 hours; French, 400 hours; German, 400 hours.
- 6. Drawing. The course in drawing must include the principles and practice of representation, construction, and decoration. Amount of time required: 200 hours.
- 7. Vocal Music. The course in vocal music must include vocal culture (in class), sight-singing from the staff, and the common technical terms used in vocal music. Amount of time required: 100 hours.

CLASSICAL SUBSTITUTIONS

Two hundred additional hours in Latin and 400 hours in Greek may be substituted for the time prescribed for chemistry, physiography, botany, and zoölogy.

Two hundred additional hours in Latin and 400 hours in either French or German may be substituted for the time prescribed for chemistry, physiography, botany, and zoölogy.

NOTES

In the series Study and Story Nature Readers, Ginn & Co. have just published *Bird World*, a bird book for children, by J. H. Stickney. The book is beautifully illustrated, with pictures in color and in black and white.

WE acknowledge the receipt of three interesting educational documents: The Report of Superintendent Charles M. Jordan, of Minneapolis; the Outline of the High-school Department of Falls City, Neb.; and the Report of Charles E. Chadsey, Superintendent of Schools, Durango, Colo.

FROM Principal Scudder, of the Hillhouse High School, New Haven, Conn., we have received a copy of the new courses of study adopted by that school. The courses offered are, academic, classical, scientific, and commercial. The latter course is three years in length, the others being four-year courses.

A most interesting program for a series of parents' conferences to be held in the Jamestown (N. Y.) High School comes from Superintendent Rovillus R. Rogers. Teachers interested in organizing such conferences—we hope there are many in number—will do well to write Mr. Rogers for a copy of this program.

THE eighth annual convention of the Southern Educational Association met at New Orleans, December 27, 29. The program presented an unusually interesting array of notable speakers on worthy themes. President Jerome H. Raymond, of the University of West Virginia, made a timely address on "Secondary Schools, the need of the South."

PRESIDENT JAMES H. CANFIELD, of the Ohio State University, publishes an address on "The Ohio State University as a School of Post-Graduate Instruction Only," in which he reviews the history of the university from its earliest beginnings in the ordinance of 1787. The paper is an interesting contribution to the history of higher education in this country.

THE fifth meeting of the Hudson River Schoolmasters' Club was held in Albany, N. Y., November 18, 19. Features of the meeting were: Address on "The Science of Sight," by Edward W. Scripture; "Electives below the College," discussed by Principals W. S. Knowlson, M. L. Walrath and W. P. Thompson; "Reading," discussed by Superintendents Sherman Williams and Charles S. Davis, and Principal J. W. Kimball. The club holds meetings twice a year.

PROFESSOR PAUL SHOREY'S edition of the Odes and Epodes of Horace gives the Latin text of those immortal classics in an excellent type, upon a fair page, prefixing a critical or rather technical introduction upon the versification, the vocabulary, and other literary traits of Horace, and appending nearly 350 pages of notes for the use of students. The feature of the work is the wealth of illustrative material, especially from the English poets.—
[Benjamin H. Sanborn & Co., Boston.]

MESSRS. HENRY HOLT & Co. have in press Essays on Education, by the late Francis A. Walker, president of the Massachusetts Institute of Technology, edited by Professor J. P. Munroe of the same institution. The author had hoped himself to collect these papers in a volume. They are conspicuous for his characteristic humanity and sound sense, and are grouped under Technological Education, Manual Education, The Teaching of Arithmetic, and College Problems (including College Athletics). A Valedictory appropriately closes the book.

There is a frequent demand for reading matter in historical French, and colleges frequently specify in their requirements readings of this sort. To provide suitable text to meet these requirements, D. C. Heath & Co., publishers, Boston, have in press for immediate issue in their Modern Language Series Francisque Sarcey's *Le Siège de Paris*, which is at once valuable from the historical point of view, and interesting in its picture of the varying emotions and the daily life of Paris, in the trying ordeal of 1870–1. It combines the interest of fiction with reading that is not fiction.

New Methods in Education is the title af a comprehensive work that will be published simultaneously in United States, England and the Continent about November 30, by Orange Judd Company of New York, and by Sampson Low, Marston & Co., London. In the five books that are to be bound in this one volume, J. Liberty Tadd lays down the first principles in art, real manual training and nature study that have been demonstrated during his 22 years' experience as director of the Philadelphia Public School of Industrial Art, and of drawing and manual training in the Roman Catholic high school and the parochial schoots of that city.

A COMMITTEE of the Associated Academic Principals of the state of New York, consisting of Principals F. D. Boynton, of Ithaca; E. W. Lyttle, of Watertown, and F. V. Lester, of Westport, is now engaged in ascertaining the changes desired by principals in the regents' syllabus. This syllabus will be published in 1900, and must then remain in force for five years. The policy of the New York regents in making changes only after most thorough discussion with the schools, and of adhering to regulations once established for a sufficient time to permit the attainment of definite results, is worthy of commendation; still more, it deserves widespread imitation.

NEW PUBLICATIONS

EDUCATION, PHILOSOPHY, PSYCHOLOGY

Ideals and Programmes. By Jean L. Gowdy, Principal Washington School, Minneapolis, Minn. Size 4½ x6½ in.; pp. 102. Price 75 cents. C. W. Bardeen.

ENGLISH LANGUAGE AND LITERATURE

- The Revival of English Poetry in the Nineteenth Century. Selections from Wordsworth, Coleridge, Shelley, Keats, and Byron. With an introduction by Elinor M, Buckingham, A.B. (Radcliffe), Instructor in English, Adelphi College. Size 4½ x 7¼ in.; pp. lxv + 248. The Morse Company.
- Home Life in Colonial Days. By Alice Morse Earle. Illustrated by Photographs, Gathered by the author, of Real Things, Works and Happenings of Olden Times. Size $5 \times 7 \frac{1}{2}$ in.; pp. 470. Price \$2.50. The Macmillan Company.
- Macaulay's Essay on Addison. Edited and Annotated by Charles Wallace French, Principal of the Hyde Park High School, Chicago. Size 4½ x 5½ in.; pp. 195. Price 25 cents. The Macmillian Company.
- Macaulay's Essay on Milton. Edited and Annotated by Charles Wallace French. Principal of the Hyde Park High School, Chicago. Size 4½ x 5½ in.; pp. 128. The Macmillan Company.
- For Peggy's Sake. By Mrs. Edwin Hohler, Author of "The Green Toby Jog" and "The Picture on the Stairs." Illustrated by F. H. Townsend. Size $4\frac{1}{2} \times 7\frac{1}{4}$ in.; pp. 216. Price \$1.00. Macmillan & Co.
- Lafayette the Friend of American Liberty. By Alma Holman Burton, author of "The Story of Our Country," "Four American Patriots," etc. With an Introduction by James Baldwin, Ph.D. Size 5 x 6¾ in.; pp. 85. Werner School Book Company.

GREEK AND LATIN LANGUAGES AND LITERATURES

- The Homeric Palace. By Norman Morrison Isham, A.M., Architect. Size 6 x 9 in.; pp. 64. Price \$1.00. The Preston & Rounds Company.
- A Junior Latin Book. With Notes, Exercises, and Vocabulary. By John C. Rolfe, Ph.D., and Walter Dennison, Ph.D. University of Michigan. Size 4½ x 7 in.; pp. 149. Price \$1.25. Allyn & Bacon.
- The Gate to Vergil. By Clarence W. Gleason, A.M., Master in the Roxbury Latin School. Size 4½ x 6% in.; pp. 162. Price 50 cents. Ginn & Co.

MODERN FOREIGN LANGUAGES AND LITERATURES

- French Review Exercises. For Advanced Pupils. By P. B. Marcou, Ph.D., Instructor in Romance Languages at Harvard University. Size 4¾ x 7 in.; pp. 34. Price 20 cents. D. C. Heath & Co.
- German Selections for Advanced Sight Translation. Compiled by Rose Chamberlain, Reader in Modern Languages at Bryn Mawr College, Pa. Size 5 x 7 ¾ in.; pp. 44. Price 15 cents. D. C. Heath & Co.
- Auf der Sonnenseite. Erzählungen und Skizzen von Heinrich Seidel, Hermann Sudermann, Emil Frommel und Nataly von Eschstruth. Selected and edited with Notes and Vocabulary by Dr. Wilhelm Bernhardt. Size 4½ x 7 in.; pp. 146. Price 35 cents. D. C. Heath & Co.

HISTORY, POLITICAL AND SOCIAL SCIENCE

- A Student's History of the United States. By Edward Channing, Professor of History in Harvard University. With Maps and Illustrations. Size 5 x 8 in.; pp. 615. Price \$1.40. The Macmillan Company.
- A Short History of England. By Mary Platt Parmele. Size 41/4 x 71/4 in.; pp. 178. Price 60 cents. Charles Scribner's Sons.
- A Short History of the United States. By Mary Platt Parmele. Size 41/4 x 71/4 in.; pp. 312. Price 60 cents. Charles Scribner's Sons.
- Introduction to the Study of History. By Ch. V. Langlois and Ch. Seignobos, of the Sorbonne. Translated by G. G. Berry. With a Preface by F. York Powell. Size $5 \times 7\%$ in.; pp. 350. Henry Holt & Co.

SCIENCE

- Fridtjof Nansen. A book for the young. By Jacob B. Bull. Translated by the Rev. Mordaunt R. Barnard, Vicar of Margaretting, Essex. One of the translators of Dr. Nansen's "Farthest North." Size 4¾ x 7 in.; pp. 132. Price 30 cents. D. C. Heath & Co.
- Philip's Experiments, or Physical Science at Home. By John Trowbridge. Size 4½ x 7 in.; pp. 228. D. Appleton & Co.
- Prismatic and Diffraction Spectra. Memoirs by Joseph von Fraunhofer. Translated and Edited by J. S. Ames, Ph.D., Professor of Physics in Johns Hopkins University. Size 5 x 8 in.; pp. 68. Price 60 cents. Harper & Brothers.
- The Free Expansion of Gases. Memoirs by Gay-Lussac, Joule, and Joule and Thomson. Translated and Edited by J. S. Ames, Ph.D., Professor of Physics in Johns Hopkins University. Size 5 x 8 in.; pp. 106. Price 75 cents. Harper & Brothers.
- Matter, Energy, Force and Work. A plain presentation of fundamental physical concepts and of the vortex-atom and other theories. By Silas W. Holman, Professor of Physics (Emeritus) Massachusetts Institute of Technology. Size 4¾ x 7¼ in.; pp. 257. Price \$2.00. The Macmillan Company.
- Laboratory Exercises in Anatomy and Physiology. By James Edward Peabody, A.M., Instructor in Biology in the High School for Boys and Girls, New York City. Size 4¾ x 7¼ in.; pp. 79. Price 60 cents. Henry Holt & Co.
- Studies in Advanced Physiology. By Louis J. Rettger, A.M., Professor of Biology in the Indiana State Normal School. Size 5½ x 8½ in.; pp. 592. The Inland Publishing Company.

MATHEMATICS

A Final Year's Work in Arithmetic. By George Q. Sheppard, A.M., Instructor in Mathematics at the Hill School. Size 4½ x 7½ in., pp. 129. Price 50 cents. George Q. Sheppard.

MISCELLANEOUS

What One can Do with a Chafing Dish. A Guide for Amateur Cooks. By H. L. S. New revised and enlarged edition Twentieth Thousand. Size 8½ x 5½ in.; pp. 150. G. P. Putnam's Sons.

